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From Surviving to Thriving: How Colleges Can Use the Science of Positive Psychology to Enhance Student Well-Being

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From Surviving to Thriving: How Colleges Can Use the Science of Positive Psychology to Enhance Student Well-Being

Abstract

Depression and anxiety have been on the rise on college campuses. Reports indicate that more than a quarter of undergraduate students are suffering from mental health issues (Eisenberg & Ketchen Lipson, 2017). While it is likely that support for mental illness will always be needed, the science of positive psychology offers additional opportunities for improving mental health. Through research-based interventions, it may be possible to reduce symptoms associated with many of the issues facing today's college students, from depression and anxiety to feelings of not belonging and a lack of resilience. This paper explores the current state of mental health on college campuses in the United States (US), the role generational characteristics may be playing, why today's students are suffering, and what can be done. By offering a variety of evidence-based programs, colleges and universities can help students shift from simply surviving to truly thriving.

Keywords

college, Generation Z, positive psychology, resilience, student, well-being, university

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Curriculum and Instruction | Higher Education | Other Psychology | Psychology | School Psychology | Student Counseling and Personnel Services

Running Head: FROM SURVIVING TO THRIVING

From Surviving to Thriving: How Colleges Can Use the Science of Positive Psychology to
Enhance Student Well-Being

Sharon F. Danzger

University of Pennsylvania

A Capstone Project Submitted

In Partial Fulfillment of the Requirements for the Degree of
Master of Applied Positive Psychology

Advisor: James O. Pawelski, Ph.D.

May 1, 2018

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Capstone Project

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Depression and anxiety have been on the rise on college campuses. Reports indicate that more than a quarter of undergraduate students are suffering from mental health issues (Eisenberg & Ketchen Lipson, 2017). While it is likely that support for mental illness will always be needed, the science of positive psychology offers additional opportunities for improving mental health. Through research-based interventions, it may be possible to reduce symptoms associated with many of the issues facing today's college students, from depression and anxiety to feelings of not belonging and a lack of resilience. This paper explores the current state of mental health on college campuses in the United States (US), the role generational characteristics may be playing, why today's students are suffering, and what can be done. By offering a variety of evidence-based programs, colleges and universities can help students shift from simply surviving to truly thriving.

Keywords: college, Generation Z, positive psychology, resilience, student, well-being, university

FROM SURVIVING TO THRIVING

Dedication

This Capstone project is dedicated to the many students who took their lives before they had the opportunity to realize their full potential. In particular, to Nicholas Moya, my son's friend, whose death motivated me to better understand why students suffer and propose possible solutions to enhance student well-being on college campuses.

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Introduction: Mental Health on College Campuses

Adolescence is a difficult time of life. This becomes even more complicated when teenagers, not yet fully developed, are sent off to college. These young adults are confronted with a variety of new experiences, from living arrangements and social interactions to more difficult academic demands and expectations. This transition can be emotionally, physically, and mentally challenging.

For many young adults, this is their first experience living away from home and their support system of friends and family. It may be difficult for them to recognize and address the emotions associated with this upheaval. During adolescence, the body goes through major physical changes, hormones are raging, and the brain is still developing (Wright & Kutcher, 2016). In addition, as the brain and body grow towards adulthood, mental health issues become more apparent. Roughly half of all mental disorders begin in the mid-teenage years and three-quarters by the mid-20s (Balon, Beresin, Coverdale, Louie, & Roberts, 2015; Kessler et al., 2007). Most college students fall into just these age categories and are considered transition-age youths (Downs, Alderman, Schneiber, & Swerdlow, 2016).

Now, consider taking adolescents in their late teenage years and relocating them away from the safety and comfort of home, close friends, and family. Send them to attend a new school with greater academic demands and challenges. Have them relocate to another city or state and live in a communal residence hall with a large group of strangers who are roughly the same age, struggling with the same vulnerabilities. Hundreds or thousands of insecure, not-so-confident adolescents all together. Welcome to freshman year in college!

The uncertainty and novelty of becoming a college freshman is to be expected. This is a stressful time in young peoples' lives as they transition from high school to college, adjust to a

difficult academic workload, and adapt to a new social environment. This transformation takes place with minimal supervision and structure (Welle & Graf, 2011). The National Center for Education Statistics (2016) projected there would be 17.4 million undergraduate students enrolled in the United States in 2017. This number is expected to climb to over 19 million by 2026. Although today's college students are at great risk for mental health problems, many do not receive treatment due to the stigma associated with mental illness (Balon et al., 2015; Downs, Boucher, Campbell, & Polyakov, 2017). This is true even though most colleges have counseling and psychological services available on campus. First year students struggle with both academic and emotional issues as they try to navigate new expectations and demands. College students are overwhelmed and suffer from emotional ups and downs (Welle & Graf, 2011). Let's take a closer look at mental health on college campuses to better understand why we need to focus on student well-being.

The 2016 Your First College Year Survey (Bates & Bourke, 2016) is prepared annually by the Higher Education Research Institute at the University of California, Los Angeles (UCLA). Their survey of over 18,500 students indicated that close to half (47.2%) of first year students had difficulty managing time and over a third (35.7%) had trouble developing effective study skills (Bates & Bourke, 2016). This same study illustrated the challenge of social adjustment; the majority of students felt lonely, homesick, and isolated. Probably most alarming is that 94.5% of this large sampling of students occasionally or frequently felt overwhelmed and 63.5% occasionally or frequently felt depressed (Bates & Bourke, 2016).

The Healthy Minds Study, prepared annually at the University of Michigan, is the largest study of the college student population and includes both students that do and don't access on-campus counseling and psychological services. It reports on data collected from over 50,000

students on 54 college campuses (Eisenberg & Ketchen Lipson, 2017). The 2016-2017 report revealed that 31% of respondents suffered from depression and 26% from anxiety. In addition, 11% experienced suicidal ideation and 21% hurt themselves through non-suicidal self-injury. Close to 75% of the students acknowledged that their emotional or mental difficulties had in some way hurt their academic performance in the prior four-week period (Eisenberg & Ketchen Lipson, 2017).

The Association for University and College Counseling Center Directors (AUCCCD) surveys over 800 colleges and universities worldwide to better understand how students use collegiate mental health services. In the 2015-2016 academic year, anxiety continued to be the most predominant concern for students (50.6%), followed by depression (41.2%), relationship issues (34.4%), self-injury (14.2%) and alcohol abuse (9.5%) (Reetz, Bershad, LeViness, & Whitlock, 2016). Of the 513,130 students who visited these campus counseling services in 2016, 26% were taking psychiatric medication, compared with 20% in 2003, and 9% in 1994 (Reetz et al., 2016). It is unclear if the change in these numbers is due to better diagnoses of individuals at a younger age, a drastic increase in anxiety and depression of college students, or a combination of the two (W. Alexander and M. Kumar, personal communication, December 19, 2017).

Suicide among teens and young adults has increased at an alarming rate; the number has nearly tripled since the 1940s (Centers for Disease Control and Prevention, 2017). Suicide is the second leading cause of death among college students; the first being accidental death (Schwartz, 2006; Turner, Leno, & Keller, 2013). This number represents a small fraction of those at risk. A nationwide study of high school students in the US revealed that 16% seriously considered suicide, 13% reported creating a plan, and 8% had tried to take their own life in the prior 12-month period (Centers for Disease Control and Prevention, 2017). Boys are more likely than

girls to succeed in suicide attempts (81% of deaths were male), but girls are more likely to report a suicide attempt (Centers for Disease Control and Prevention, 2017). While suicide ideation is more commonly found in those with severe depression, college students with mild and moderate depressive symptoms may also experience suicide ideation (Cukrowicz et al., 2011). And, those who have experienced one episode of suicidal ideation are likely to have more (Drum, Brownson, Burton Denmark, & Smith, 2009). The traditional model of treating mental illness has focused on treating each individual. With so many students experiencing depression, anxiety, and suicidal thoughts, college campuses need to reduce the risk of these mental health concerns by taking steps to enhance the health and well-being of the entire student population (Drum et al., 2009).

Student well-being is important not only for the years these young adults spend on campus, but also for their ability to succeed in the workforce. When students have difficulty adjusting to college, they are more likely to drop out before earning their degree. Higher education is correlated with a better quality of life as measured by subjective well-being, sense of control, happiness, and life satisfaction. Research shows that workers who rank higher in subjective well-being are absent less often, maintain better health, exhibit greater self-regulation, are more motivated and creative, form more positive relationships, and are less likely to leave (Tenney, Poole, & Diener, 2016). Helping students thrive may also result in a healthier and happier workforce.

As concerns of mental health issues on college campuses have become more widely publicized, it has helped to increase general public awareness. Identifying and taking advantage of opportunities to enhance student well-being may help to reduce the risk of symptoms associated with depression and anxiety. Through evidence-based interventions, students can

develop the skills to build stronger resilience and enable them to live a life with greater flourishing, not only in college but for their entire lives. As we take a closer look at today's college students, we will dive into why this generation may be different from those in the past and some of the unique challenges they face in today's world. Maybe due to social media and technology use, or less in-person social interaction and over-involved parents, today's young adults are having a different college experience than past generations. We will discuss the role positive psychology can play in boosting well-being on college campuses and a variety of evidence-based interventions that may help students to thrive in college and beyond.

Part I: Issues Facing Today's College Students

A. What Role Do Generational Differences Play?

To better understand why mental health on college campuses has become a crisis, we need to take a look at today's students compared with previous generations. What has changed over the past few decades and why is that having an impact on today's young adults? Each generation has its own attitudes, beliefs and behaviors that make it unique. While we may make generalizations about each generation, it is important to note that there are always individual differences. The characteristics discussed here are an attempt to capture some overall trends. Identifying these tendencies may help us better understand why the current generation of students is struggling in certain domains.

i. Baby Boomers

Baby Boomers (1946-1964) represent one of the largest generations with close to 75 million people in the United States (Seemiller & Grace, 2016). This surge in population was due to the end of WWII; men came home from war, the economy was healthy, and there was greater stability in the country. These circumstances made it an ideal time to start a family. Boomers are

thought to be hard working, driven to succeed, and materialistic. The Baby Boomer generation went on to be the parents of Generation X (Gen X) and Generation Y (Millennials) (Seemiller & Grace, 2016).

ii. Generation X

Generation X (born between 1965 and 1980) witnessed the introduction of the personal computer. This generation, much smaller than the Baby Boomers, has a population of roughly 50 million (Seemiller & Grace, 2016). Gen X, raised with both parents in the workforce, became “latchkey” kids. After school, they let themselves into their homes and developed independence at an early age. Gen Xers are considered cynical, skeptical, and pragmatic (Seemiller & Grace, 2016). Their parents experienced an increase in divorce rates, yet two-thirds of Gen Xers have chosen to marry and most have children. They are the generation that got the world to focus on work-life balance; and they are also the parents of Generation Z (Seemiller & Grace, 2016).

iii. Generation Y

Generation Y (Millennials) were born in the 1980s through early 1990s. While close in age to Generation Z, they have different defining characteristics and are most commonly criticized as being self-focused, entitled, and overconfident (Seemiller & Grace, 2016; Twenge, 2017b). Also known as the “Me Generation,” they have delayed getting married and starting a family to further their education and launch their careers. Their Baby Boomer parents have provided financial and emotional support as they reflect on what they want from life. Millennials were raised in an “everyone is a winner” society; they have high expectations for their career and expect to have a good quality of life (Seemiller & Grace, 2016). It is often challenging in the workplace when Baby Boomers and Gen Xers, both used to the boundaries of a traditional

workday, encounter Millennials who are always connected and frequently multitasking (Seemiller & Grace, 2016).

iv. Generation Z

Just as the world was finally adjusting to Generation Y, we have now been introduced to Generation Z, referring to those born from 1995 through 2010 (Seemiller & Grace, 2016). This is the generation that comprises most of the current and incoming undergraduate college population. The oldest members of this generation were in their early teens when the iPhone was introduced in 2007. They have grown up with screens and smartphones and lead more sedentary lifestyles than prior generations (Seemiller & Grace, 2016). Generation Z is obsessed with safety, concerned about their financial future, and have no patience for inequality and prejudice. Because they have grown up in a very protected environment, taking fewer risks, this generation acts about three years younger than their age (Twenge, 2017b). Generation Z is also the most ethnically diverse generation in the US thus far. Characteristics associated with this generation include: loyalty, thoughtfulness, compassion, open-mindedness and responsibility (Seemiller & Grace, 2016). Probably the greatest shift from the Millennials or “Me” generation is that Generation Z is the “We” generation, motivated to making a difference and committed to making the world a better place (Seemiller & Grace, 2016).

This generation grew up alongside the internet and are considered digital natives – accustomed to constant connectivity through technology. Consequently, these students are more likely to be continuously monitoring friends’ social activities and postings and suffering from FOMO, Fear Of Missing Out (Seemiller & Grace, 2016; Twenge, 2017a). This can lead to feelings of inadequacy and loneliness which are correlated with depression; it is unclear if loneliness causes the obsessive smartphone use or the other way around (Twenge, 2017b). Due

to the screens, Generation Z spends less time face to face than previous generations. College students in 2016 (versus the 1980s) spent four hours less each week socializing with friends and three hours less partying. This equates to seven hours less each week of in-person social interaction (Twenge, 2017b). Fewer in-person interactions throughout childhood can make socialization in college more challenging; it is no surprise that new college students express concerns about belonging or feeling that they don't fit in. Generation Z relies on social media for peer communication which lacks the nuances and benefits of in-person interaction. This may be why many freshmen experience loneliness and isolation (Bates & Bourke, 2016).

The pain students feel from social rejection or exclusion may lead to alcohol and drug abuse (Shatkin, 2017). Drinking in college is nothing new. The trend since the early 1990s, has actually been towards less alcohol use, but greater use of illicit drugs (Schulenberg et al., 2017). That being said, a 2016 study showed over 40% of college students reported being drunk in the prior 30 day period and a similar percentage reported illicit drug use during the prior year (Schulenberg et al., 2017). This is disturbing data. There is some evidence that the brain absorbs social and physical pain similarly (Eisenberger & Lieberman, 2004). In other words, students who feel socially rejected or excluded may experience symptoms similar to physical pain. Some may use alcohol to numb the pain of rejection. Unfortunately, binge drinking in college is correlated with greater academic attrition, increased college dropout rates, and lesser job prospects (Jennison, 2004).

As mentioned earlier, this generation acts younger than past generations and is in no rush to grow up and take on the responsibilities of adulthood (Twenge, 2017b). Even in college, Generation Z parents are very involved. They register their kids for classes, remind them of deadlines, and make sure they are awake to attend class (Twenge, 2017b). This "helicopter

parenting” leads to lower psychological well-being, increased anxiety and depression (Schiffrin et al., 2014), and can negatively impact academic achievement (Schiffrin & Liss, 2017). It’s no surprise that these students refer to themselves as kids. This childhood coddling has led them to be a generation that likes and expects safety. They are sometimes called “Generation Snowflake” due to their fragile nature because they are likely to melt under the slightest pressure. They think of college as “home” and expect to be insulated and kept safe as they were in their childhood home, but without a curfew (Twenge, 2017b).

So, while Generation Z is encountering some of the same college experiences as prior generations, there are some noticeable, relevant differences. From social media and technology use, to less in-person social interaction and over-involved parents, these students have had fewer opportunities to solve their own problems. As a result, they appear to have developed less resilience than previous generations. Let’s look more closely at why these students are suffering to better understand what can be done to help.

B. Why Are Today’s College Students Suffering?

An examination of the existing literature on the causes of stress among today’s college students, reveals five distinct categories as being especially relevant. While acknowledging that there are likely to be additional factors at play, in this paper I will address the five following categories: (a) lack of self-care, (b) concerns that they don’t belong, (c) tendencies towards perfectionism, (d) a lack of resilience, and (e) insufficient social support.

i. Lack of Self-Care

Some students arrive at college with the skills needed to manage their time and take care of themselves, but some do not. For many college students, this is the first time they are living away from their parents and their childhood home. Getting enough sleep, eating well, and

engaging in regular exercise may have occurred in high school due to parental oversight, participation in school sports, or possibly self-motivation. The typical day for a high school student provides structure which helps young adults frame their day with a defined start and end time. In college, classes are at varying times, schedules are irregular, and students are known to stay up late and sleep late. This shift from structure and supervision to an undefined schedule with minimal oversight may be one reason self-care is not always a priority for students. For purposes of this paper, we will focus on three areas of self-care: sleep, nutrition, and exercise.

There has been compelling research on the importance of sleep and its impact on cognitive ability and depressive symptoms. In a recent study, 50% of college students reported daytime sleepiness (an inability to remain attentive resulting in drowsiness). Seventy percent of the students surveyed get insufficient sleep, reporting less than eight hours a night (Hershner, 2016). This lack of sleep can result in lower grade point averages, impaired mood, and increased risk of depression (Pilcher & Walters, 1997; Stickgold, 2015). Poor sleep hygiene - in particular, constant use of screens that emit blue light - contributes to sleep deficiency by suppressing the release of melatonin, the hormone which signals the body that it's time to sleep. By trying to compensate for lack of sleep with caffeine and energy drinks, a student may enter into a vicious cycle of sleep deprivation (Hershner, 2016; Peach, Gaultney, & Gray, 2016). In one study of over 1,100 students, more than 60% were categorized as poor-quality sleepers (Lund, Reider, Whiting, & Prichard, 2010). Students report frequent use of over-the-counter sleep aids and recreational drugs to help with staying awake and falling asleep. Poor quality sleepers report greater physical and psychological health problems than their well-rested counterparts (Lund et al., 2010).

Unfortunately, many students are unaware of the extent to which a lack of sleep also negatively affects their cognitive abilities (Pilcher & Walters, 1997). A person awake for 17-19 hours without sleep, exhibits brain function similar to that of a person with a blood alcohol level of .05%; longer periods without sleep show even worse performance - similar to a blood alcohol level of .1% (Williamson, 2000). As a point of reference, in the US, drivers with a blood alcohol level over .08% are considered to be driving under the influence (DUI) or driving while impaired (DWI) (“DUI & DWI,” 2018). Students state overwhelmingly that stress (both emotional and academic) negatively impacts their sleep (Lund et al., 2010). Ironically, the lack of sleep further limits their ability to handle stress.

In addition to not getting sufficient sleep, college students tend to eat poorly and not get enough exercise. Many college students skip breakfast (Phillips, 2005) which may negatively impact academic performance and reduce energy (Phillips, 2005; Rampersaud, Pereira, Girard, Adams, & Metzl, 2005). Those who skip breakfast are more likely to consume sugary drinks and are less likely to exercise (Thiagarajah & Torabi, 2008) further amplifying the lack of self-care. Only six percent of students report eating a minimum of five servings of fruits and vegetables daily and less than half meet the recommendations for exercise (Schweitzer, Ross, Klein, Lei, & Mackey, 2016). A lack of self-care (whether it’s sleep, nutrition, or exercise) can have negative implications for student well-being.

ii. Concerns of Not Belonging

Another contributor to stress, particularly for freshmen, is the sense that they do not belong. Social connectedness or a sense of belonging is an important factor in life satisfaction for college students (Blau et al., 2016). Whereas past generations forged friendships through in-person interaction, Generation Z’s use of social media for peer communication may be inhibiting

the development of these relationships (Shakya & Christakis, 2017). A lack of social relationships may also result in lower immunity, increasing the likelihood that a student will get sick (Cohen, Doyle, Turner, Alper, & Skoner, 2003). Getting sick at school can magnify the stress of living away from home. While belonging is an issue for many students, regardless of background or ethnicity, much of the literature focuses on those students considered to be at greatest risk - minority, international, and first-generation students (those whose parents did not attend college).

Minority students often struggle to overcome prejudice and adversity as well as the achievement gap, making social belonging an even greater issue (Walton & Cohen, 2011). Since WWII, the trend of foreign students attending college in the US has risen. Currently, the US represents about 22% of the international student market (Bhochhibhoya, Dong, & Branscum, 2017). Students from overseas encounter cultural differences, language barriers, and discrimination, all of which make it even more challenging to 'fit in' (Smith & Khawaja, 2011). There has also been a recent push at American universities to admit first-generation students. These students often lack the economic and academic resources of their peers, creating a cultural mismatch (Stephens, Townsend, Markus, & Phillips, 2012). This can make adjustment to college difficult and amplify feelings of not belonging. Many students, across culture, ethnicity, and socio-economic class, feel that they don't fit in or belong in the new environment of college. While it may be more apparent in at-risk groups (minority, international, and first generation), the feeling of not belonging can impact all students.

iii. Tendencies Towards Perfectionism

A third source of stress for college students is a perfectionist mindset. Perfectionism is described as having two components: setting high achievement standards and being overly

critical on self-evaluation (Curran & Hill, 2017; Suh, Gnilka, & Rice, 2017). Striving and setting high performance expectations in itself is not a problem. When combined with minimal self-criticism, it is considered to be “adaptive perfectionism” which is associated with lower levels of depression and anxiety. Individuals with perfectionist strivings who are very critical of themselves, (“maladaptive perfectionism”), however, exhibit higher levels of depression, anxiety, and perceived stress (Suh et al., 2017).

A meta-analysis of over 40,000 students between 1989 and 2016 reveals an upward trend in three types of perfectionism: self-oriented, socially prescribed, and other-oriented (Curran & Hill, 2017). Keep in mind that current students are a mix of both Generation Y (Millennials) and Generation Z. Those who suffer from self-oriented perfectionism are putting greater demands on themselves than prior generations (by a magnitude of ten percent). This increase is believed to be a result of cultural shifts including greater competition, individualism, and controlling parental practices (Curran & Hill, 2017). Individuals who succumb to socially prescribed perfectionism do so in an effort to gain approval from others. This dimension increased by 33 percent, much more than the other two types of perfectionism over the same time period. This increase is consistent with an observed rise in externality of control, anxiety, and social disconnection which are worrying trends indicating greater sensitivity to outside pressures than prior generations (Curran & Hill, 2017). Finally, other-oriented perfectionism also saw an increase (16 percent) which reflects the current generations’ imposing of greater demands and unrealistic standards on those around them. This is consistent with the reputation of the Millennials, or “Me” generation but it is still unclear how many of these characteristics will also be true for Generation Z.

iv. Lack of Resilience

One of the greatest concerns regarding Generation Z is their lack of resilience. Resilience is the ability to bounce back from adversity or endure hardship (Reivich & Shatte, 2003; Smith, Tooley, Tugade & Fredrickson, 2004). While one's capacity for resilience may be partially hereditary, it is not a fixed trait (Reivich & Shatte, 2003). There is evidence that those who are resilient exhibit a higher positive to negative affect ratio, fewer physical health problems, and experience less perceived stress (Smith et al., 2010). Resilient individuals are better able to adapt to challenges and function at a high level (Leppin et al., 2014). Many of the factors that create resilience are elements that also lead to greater human flourishing. Because Generation Z students have been kept extremely safe and over-protected, they may not have had as many opportunities to fail and recover during their early years and adolescence (Schiffrin & Liss, 2017). A lack of resilience in Generation Zers is worrisome because resilience is a critical element needed for success in school, work and life (Reivich & Shatte, 2003; Yeager & Dweck, 2012). In prior generations, kids learned to deal with disappointment at an earlier age, helping them to develop coping mechanisms. How students handle adversity can be predicted by their explanatory style.

The concept of explanatory style stems from attribution theory which suggests that motivation is based on how one interprets the causality of success and failure (LaForge & Cantrell, 2003). Someone with a pessimistic explanatory style is more likely to view bad events as permanent (not temporary), pervasive (not an isolated event), and personal (their fault). Pessimistic students who perceive themselves as having little or no control over poor outcomes are more likely to have lower GPAs, and are at greater risk of anxiety and depression (Perry et al., 2017; Peterson & Barrett, 1987; Seligman, 2011; Seligman, Schulman, & Tryon, 2007). An

optimist, on the other hand, views bad events as temporary, local (an isolated event), and not personal (Seligman, 2006). Students with optimistic explanatory styles are more resilient (Reivich & Shatte, 2003), which is correlated with lower perceived stress, greater academic achievement, and better physical health (Peterson & Barrett, 1987; Smith et al., 2010).

v. Insufficient Social Support

Finally, another source of stress can be a lack of appropriate and sufficient social support. Over-involved parents might mean well but may unintentionally inhibit the student's ability to develop age-appropriate independence. On the other hand, it is important for parents to be supportive as their children go through this difficult transition. Having support from friends and family, especially freshman year, increases the likelihood of a student reaching graduation (Strom & Savage, 2014). Social support provides the overall feeling that one is cared for (Whitney, 2010) which is particularly important to Generation Z (Twenge, 2017b). There is also a correlation between social connectedness and life satisfaction (Blau et al., 2016); highly social students are more likely to be happy (Diener & Seligman, 2002).

Social connections can be especially challenging for international and first-generation students. American students can easily communicate with their parents and childhood friends about their experiences. In forming new friendships, American students do not have the added challenges that international students have of navigating cultural changes and a different language. For international students, time zone differences and parents who may not be able to relate to their experience may create obstacles to a solid support system. While their parents are likely proud of their decision to attend college, first generation students may have trouble relaying their experience to their parents who did not attend college. There is evidence that students who have five or more adults they can turn to report significantly lower stress, greater

life satisfaction, and better academic performance (Whitney, 2010). We will explore this further in Part II of this paper which focuses on solutions.

It is clear that mental health on college campuses, in particular anxiety and depression, is a growing concern. Due in part to advanced technology, today's students are facing challenges that are different from prior generations. The transition to college has raised concerns about the ability of current incoming students to take care of themselves, develop a sense of belonging, reduce perfectionist tendencies, exhibit resilience, and seek sufficient social support. The rest of this paper will focus on how the science of positive psychology can play a role in changing these trends. Through evidence-based interventions, colleges can help students thrive at college.

Part II: Solutions – Helping Students Thrive on Campus

A. Pursuing Research from Positive Psychology

The modern study of psychology began in the 19th century with a focus on studying behavior and mental processes. Since the mid-20th century, post-World War II, the emphasis of psychology seemed to shift towards remediation of mental illness. As a result, here have been tremendous strides made in the therapeutic and pharmacological treatment of many mental health conditions including: depression, anxiety, bipolar disorder, and schizophrenia (Seligman & Csikszentmihalyi, 2000). The creation of classification models, such as the *Diagnostic and Statistical Manual of Mental Disorders (DSM)* (1952), has created a common universal language to describe and diagnose mental illnesses throughout the world (Seligman, 2011). While this progress has relieved the suffering of many, it does not address well-being and human flourishing. On a rating scale from negative ten to positive ten, it is intended to move individuals from negative towards zero, but there are far fewer efforts made to move people to the right of

zero where individuals can lead their best lives. Unfortunately, the absence of mental illness does not necessarily equate to the presence of mental well-being.

In 1998, Martin Seligman, as President of the American Psychological Association (APA), challenged his colleagues to explore the science behind what makes a life worth living. He named the field “Positive Psychology” with the purpose being not to supplant the traditional field of psychology, but rather to complement it. In addition to repairing what goes wrong in life, he felt there should be a focus on building what is good (Seligman & Csikszentmihalyi, 2000). While research related to positive psychology was already underway, the creation of the field led to a more concerted effort to provide the scientific research to support theories related to human flourishing. This is evidenced by the tremendous surge in research articles related to subjective well-being, as seen in Figure 1.

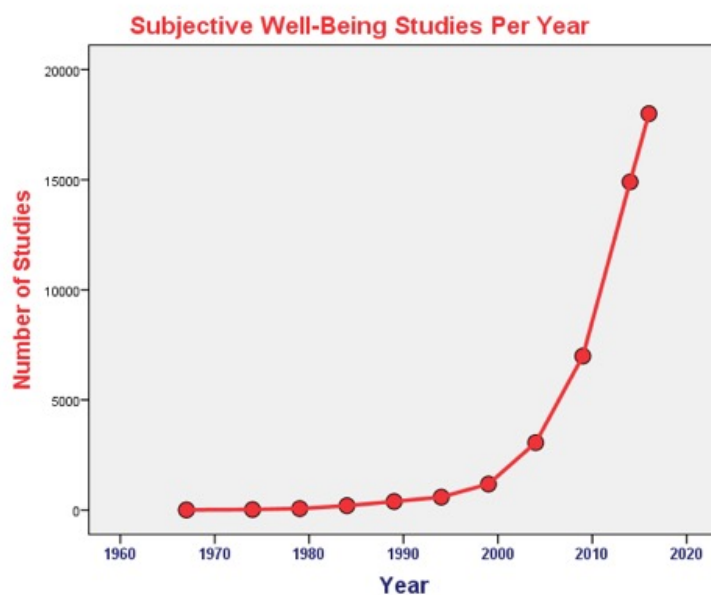


Figure 1.

Increase in studies on subjective well-being (E. Diener, personal communication, September 8, 2017).

One of the fundamental assumptions of positive psychology is that human goodness is as essential and authentic to humans as is disease and mental illness. Neither one is secondary or should take a back seat to the other (Peterson, 2006). What is the good life? What is happiness?

What role does society play? These questions, which are at the core of positive psychology, have been asked for thousands of years by philosophers like Aristotle, Socrates, Confucius, William James, and Abraham Maslow. More modern religious leaders like the Dalai Lama, The Lubavitcher Rebbe, and the Pope have posed similar questions about meaning and purpose. While the underlying motive driving positive psychology, to enhance human flourishing, is not new, the empirical research to support theories that promote well-being is.

Since Seligman's speech to the APA in 1998, the field of positive psychology has made great strides. One notable achievement is Cristopher Peterson and Martin Seligman's creation of a classification that provides a common language for assessing the strengths and virtues that make the good life possible. The *Character strengths and virtues: A handbook and classification* (Peterson & Seligman, 2004) is modeled after, and complements, the DSM (1952), which describes mental disorders. Person and Seligman spent three years surveying the best thinking on ethical, moral, religious and philosophical traditions from the past 2500 years from all over the world. The result is the compilation of a universal set of 24 character values that fall into six virtues that are relevant to everyone (Peterson & Seligman, 2004). The VIA Survey of Character Strengths enables individuals to assess their own strengths and has been taken by over six million people in more than 250 countries (R. Niemiec, personal communication, January 12, 2018).

B. The Promising Role of Positive Interventions

How do you take the research results of a relatively new science, like positive psychology, and apply it in a meaningful way? This is the role of positive interventions. The term, "positive intervention," refers to a wide range of activities whose primary focus is improving one's life without harm to another. In an effort to enable more people to flourish,

positive psychology practitioners have introduced positive interventions as a way to promote well-being. There has been extensive research to help determine what factors help to make a positive intervention successful. For example, members of individualist cultures benefit more from current positive interventions than members of collectivist cultures (Sin & Lyubomirsky, 2009). For this reason, especially on diverse college campuses, it's important to offer a variety of options and to customize interventions based on individual preferences and cultural needs.

While there are many factors that play a role in the success of positive interventions, based on some of their generational characteristics, the following five elements appear particularly relevant for Generation Z college students:

- Creating healthy habits
- Embracing a growth mindset
- Developing intrinsic motivation
- Building self-efficacy
- Offering variety and customization

i. Creating Healthy Habits

About 45% of what we do daily is based on habit rather than conscious thought and deliberate action (Neal, Wood, & Quinn, 2006). While there are some interventions that only need to be done once to have long lasting impact, interventions aimed at self-care usually require regular attention until they become routine. For example, eating one healthy meal, getting a single good night's sleep, or having one good workout, is likely to only have a temporary impact.

This notion of the importance of our actions becoming habit is reinforced by philosopher William James (1892, 1984). Habits, James argued, are formed by the creation of neural pathways by the sensory nerve-roots of the brain. To do the same thing we have always done

requires no effort because the pathways already exist. When creating a new habit, more effort is required to deepen the path over time as the new habit is created. As a pathway is reinforced and deepened, the action becomes more automatic. For a new habit to stick, it takes both consistency and continuity of intent. To maintain the habit, we need to exercise it daily (James, 1892, 1984). Habits are created only through regular, sustained action.

ii. Embracing a Growth Mindset

When it comes to the effectiveness of positive interventions, it is also important to embrace a growth mindset, the belief that your talents can be developed through hard work, good strategies, and input from others (Dweck, 2008). In her book, *Mindset: The new psychology of success*, Dweck (2008) proposes that individuals approach goals with either a fixed or growth mindset. Those with a fixed mindset view failure as an identity (“I am a failure”) rather than an action (“I failed”). This significantly limits their ability to succeed. Those with a growth mindset, on the other hand, find setbacks motivating and informative; they learn from their mistakes. This is consistent with an optimistic explanatory style (discussed on page 16 of this paper). A growth mindset does not come naturally to many Generation Zers. Finding interventions that can enhance their growth mindset and develop a more optimistic explanatory style will help these students build resilience.

iii. Developing Intrinsic Motivation

The research cited earlier in this paper, regarding the trends in perfectionism increasing from outside sources (Curran & Hill, 2017), speaks to a lack of intrinsic motivation. Based on self-determination theory, a positive intervention is more likely to be successful if the student is intrinsically motivated to participate (Brown & Ryan, 2015), meaning they are driven by a desire to do something for its own sake, not for a reward or to avoid punishment. When students feel

confident in their abilities, they are more likely to adopt an activity due to intrinsic motivation (Brown & Ryan, 2015). It is important to create and promote programs for well-being in which students have a genuine interest.

iv. Building Self-efficacy

Self-efficacy is the belief in one's ability to succeed. When you trust your abilities, you are motivated to confidently face challenges (Maddux, 2009). This conviction enables you to make better choices and persevere. Most importantly, self-efficacy, like an optimistic explanatory style, implies the belief that your actions can change outcomes and make a difference (Maddux, 2009). Like a growth mindset, self-efficacy is related to resilience and is not always present in the current generation of students. Some suffer from imposter syndrome, the feeling that they don't deserve to be where they are and that others will discover them as a fraud, in spite of evidence to the contrary (Clance & Imes, 1978; Kumar & Jagacinski, 2006; Lane, 2015). This belief stems from an inability to accurately and objectively assess their own abilities (McAllum, 2016). Positive interventions that build self-efficacy are likely to enhance the student's resilience and reduce feelings of imposter syndrome.

v. Offering Variety and Customization

Generation Z was raised with more technology at their fingertips than any prior generation. They are chronic multitaskers, accustomed to constant novelty. As a result, it is important to offer them a variety of programs from which they can select. Having choices helps to promote autonomy, another key element of self-determination theory (Brown & Ryan, 2015). For positive interventions to work on a long-term basis, they need to offer variety and be customized to meet the needs and preferences of the individual (Lyubomirsky, 2007). This is especially true when dealing with a diverse student body. One reason positive interventions

sometimes fail in the long run is due to hedonic adaptation (Bao & Lyubomirsky, 2014). While there may be an initial boost in happiness due to a new activity, this abates over time as one adapts to a new happiness level. Variation in positive events and emotions helps to protect against hedonic adaptation by reducing the chance of boredom. Through variety and awareness of the benefits of positive interventions, the likelihood of adaptation is reduced, and the probability of long-term benefits is increased.

Now that we understand the role of positive psychology and the importance of positive interventions in applying this research, we can dive into specific ways to help bolster college students' well-being. The rest of this paper is focused on offering practical interventions covering a wide range of topics requiring varying degrees of effort and expense. I will also share what I have learned about programs currently taking place on many college campuses to enhance well-being, what it means to be a positive university, and how and why it is important to measure results of well-being initiatives.

C. Putting Positive Interventions to Work for Students

In this section, I propose a number of positive interventions to address some of the issues facing today's college students that were discussed earlier in this paper. The list was developed (and is organized) based on a literature review of research done specifically in the following areas of concern: self-care (physical and brain health), belonging, self-efficacy, stress reduction and resilience, and support systems. The interventions may provide benefits in multiple areas, but each is listed in the section of primary focus. Some have been specifically tested (and are cited accordingly) while others are based on evidence from similar interventions that have been successful. These are merely suggestions to get started. Each institution is encouraged to modify these proposed interventions based on the specific needs of their students and what they believe

will be most successful. Some trial and error may be necessary to find the right mix of programs for a given student body. See Appendix A for a chart summarizing all of the proposed interventions.

i. Creating Self-Care Habits: Physical and Brain Health

The following group of interventions are focused on improving self-care in students. By encouraging them to eat breakfast, get more sleep, and exercise, students can increase both physical and brain health.

- a. *Establishing a breakfast bar can provide better nutrition and increased academic performance.*

There is robust evidence to support the importance of breakfast – including improved cognitive function and better academic performance (Phillips, 2005; Rampersaud et al., 2005). The majority of students who skip breakfast say it's due to a lack of time (Thiagarajah & Torabi, 2008). While many campuses offer on-campus dining options, perhaps having a breakfast bar in the residence halls would provide a more convenient grab-and-go option for students. Something as simple as a granola bar or banana might make it easier for students to start their day with some nutrition.

- b. *Encouraging more movement throughout the day can increase cognition and physical well-being.*

As humans, we were designed to move; our caveman ancestors walked many miles each day. Our DNA has not changed, but we have become a sedentary society, with many affluent adults spending 70% or more of their waking hours sitting (Owen, Sparling, Healy, Dunstan, & Matthews, 2010). Even those who exercise regularly can experience elevated risks of mortality from all causes and from cardiovascular disease if they spend a lot of time sitting (Healy et al.,

2008; Katzmarzyk, Church, Craig, & Bouchard, 2009; Owen et al., 2010). Between sitting in long classes and studying for hours, students can be very sedentary. Some suggestions to encourage more movement include: (a) using standing desks either in residence hall rooms or libraries, (b) post signs encouraging the use of stairs, (c) ask professors to offer movement breaks during long lectures, (d) allow and encourage students to stand in the back of the room during lectures.

- c. *Providing an incentive to exercise can build connection, enhance physical well-being, increase cognition, reduce stress, and build self-regulation.*

Maintaining a regular exercise program is correlated with improved self-regulation (Oaten & Cheng, 2006). There is also evidence that physical activity can enhance self-perception and self-esteem. Recent research found that self-esteem is the best predictor of physical well-being (Baldwin, Towler, Oliver, & Datta, 2017). If there is a fitness center on campus, each time a student swipes their college ID card, they should receive credits towards campus ‘swag.’ Encouraging students to exercise with a buddy will provide accountability and increase both connection and the likelihood that both students will exercise (King, Tergerson, & Wilson, 2008).

- d. *Offering a sleep incentive program and workshop may enhance sleep hygiene, encourage more sleep, improve cognition, and enhance physical well-being.*

Many young adults are unaware of the harmful effects of lack of sleep, the benefits of adequate sleep, and how to go about getting a good night’s sleep (Djonlagic et al., 2009; Hershner, 2016; Stickgold, 2015). A short workshop (in person or an on-line tutorial) could provide specific strategies students can use to enhance sleep quality (Peach et al., 2016). Young adults may not take action even when they know the data, so a Fitbit (or similar tracking device)

could be worn and incentives could be offered for better, longer sleep. A simple t-shirt with a clever statement about sleep may entice others to pursue the incentive as well.

- e. *Instituting a quiet residence hall offers students who value sleep an option that may lead to enhanced sleep hygiene, more sleep, improved cognition, and enhanced physical well-being.*

While the circadian rhythm of many young adults shifts their biological clock to staying up later (Kelley, Lockley, Foster, & Kelley, 2015), some students still prefer to go to sleep at a more reasonable hour. When one goes to sleep and wakes up is more closely correlated with academic achievement than the total amount of time spent asleep (Eliasson & Lettieri, 2010). Some students stay out late studying or partying and may come back to their rooms late at night. This and loud music or TV playing can be disruptive for others who wish to get a good night's sleep. A residence hall with a designated time when all residents are expected to be quiet makes it easier for students to benefit from a decent night's sleep without interruption.

- f. *Exposing students to less blue light can lead to better sleep hygiene, more sleep, improved cognition, and enhanced physical well-being.*

Melatonin is a hormone that is naturally released to signal our body that it is time for sleep. Exposure to blue light from computers, tablets and smartphones inhibits secretion of melatonin which may cause interrupted or poor quality slumber (Chellappa et al., 2013). Amber glasses can be worn to reduce the effect of blue light (Kimberly & James, 2009). These glasses could be offered to students since many may feel compelled to work on their computer until late at night.

ii. Developing a Sense of Belonging

In addition to the feeling that one belongs, increased sociability may lead to higher quality social interactions and reduced risk of disease and catching a cold (Cohen et al., 2003).

The following interventions are aimed at increasing a sense of belonging in new students.

- a. *Having a common read of UThrive: How to Succeed in College (and Life) can help to create a common language, serve as a valuable resource to students, build community, encourage diverse thinking, create a sense of belonging, provide an opportunity for discussion on well-being, and enhance academic achievement.*

Many schools have integrated a common read (all students read the same book) into freshman orientation programs. Reading the same book can be used to encourage students' exploration of values, openness to diversity, feeling of belonging, and integration of social and academic experiences on campus (Nadelson & Nadelson, 2012). Small group discussions enable students to build connections through a shared experience (Daugherty & Hayes, 2012) while also engaging in a variety of viewpoints from their fellow students who represent a wide range of backgrounds and cultures (Ferguson, 2006). *UThrive: How to Succeed in College (and Life)* (2017) provides great information and resources for college students. The book is written by Dan Lerner and Alan Schlechter, the instructors of the Science of Happiness undergraduate course at New York University. Thousands of students have already benefited from their class; this book provides useful anecdotes and information backed by research in an entertaining format.

- b. *Holding a volunteer and activities fair at freshman orientation can increase belonging, help build relationships, enhance well-being, increase academic achievement, and improve time management.*

Most college campuses offer many opportunities for students to join clubs and activities or volunteer their time. When students look to enhance their well-being through avenues that are not purely focused on hedonistic pleasure, they feel that their lives are more meaningful and satisfying (Steger, Kashdan, & Oishi, 2008). A volunteer and activities fair during freshman orientation could facilitate this for incoming students. This would provide an opportunity to connect with upper classmen as well as find a common interest with fellow classmates. There is also evidence that involved students achieve greater academic success (Webber, Krylow, & Zhang, 2013), enjoy better time management skills (Mogilner, Chance, & Norton, 2012), and benefit from greater overall well-being (Kilgo, Mollet, & Pascarella, 2016).

- c. *Conducting a brief writing and video intervention can increase sense of belonging and may reduce the academic achievement gap for minority students.*

This intervention is informed by the work of Stanford University researchers Walton and Cohen (2011). They developed an intervention where second semester freshmen read surveys, presumably from upper classmen. The survey responses explained how while they initially felt that they did not belong and had feelings of inadequacy, over time their sense of belonging and abilities improved. The study participants were then asked to write and record on video how these responses related to their own experience of belonging. They were told that the recordings would be used to help future students. The study results indicated a significant reduction in the achievement gap for minority students throughout the rest of their years at college (Walton & Cohen, 2011). This experiment was later replicated on a larger scale with over 9,500 students from private and public universities as well as a charter high school (Yeager et al., 2016).

This intervention helps students to have a mindset shift to believe that the challenges experienced in transitioning to college are typical and will improve; feelings that they don't

belong are only temporary. There is growing evidence that this type of intervention before or during freshman year can help students feel a greater sense of belonging and reduce the achievement gap, particularly for minority and first generation students (Walton & Cohen, 2011; Yeager et al., 2016).

This intervention can take as little as an hour and some of the key researchers in this area are involved in two organizations that help academic institutions create customized programs. The College Transition Collaborative aims to create learning environments that produce more equitable outcomes for college students. Their goal is to have all students feel valued, respected, and confident that they can excel. You can visit their website at:

<http://collegetransitioncollaborative.org/>. Projects for Education Research that Scales (PERTS)

hopes to empower educators to apply evidence-based strategies in an effort to advance educational excellence and equity on a large scale. Their website can be found at:

<https://www.perts.net/>.

- d. *Organizing pre-orientation small group programs can increase sense of belonging and help build relationships.*

Many schools offer orientation programs for freshmen. Some also offer pre-orientation programs. For larger schools, in particular, this is an opportunity to make the expansive community seem smaller and more accessible. By offering a variety of programs (camping, hiking, community service, exploring the arts) students can pursue an interest while developing new relationships in a smaller group setting. Sharing a good experience and communicating with friends about it, creates higher positive affect (Gable, Impett, Reis, & Asher, 2004). Positive relationships is a key ingredient of psychological well-being and greater happiness (Bowman, 2010; Diener & Seligman, 2002).

iii. Building Self-Efficacy

As mentioned earlier, self-efficacy is an important factor for some positive interventions to have their desired outcome. Students who believe they have the ability to succeed are more likely to embrace the idea that their actions can impact outcomes (Maddux, 2009). Self-efficacy is also a building block for resilience (Reivich & Shatte, 2003).

- a. *Teaching strength building and strength spotting can lead to greater well-being, reduced depressive symptoms, and enhanced relationships.*

As mentioned earlier, the VIA Survey of Character Strengths is free and available online through the viacharacter.org website. Providing a workshop on character strengths will enable students to identify their own strengths, learn to build on them, and recognize the strengths of their classmates. By focusing on strengths, rather than deficiencies, students will be able to find more opportunity for flow, activities that engage them by challenging their skills (Csikszentmihalyi, 1990). Using signature strengths in a new way has been shown to effectively increase happiness and reduce depression (Seligman, Steen, Park, & Peterson, 2005). Spotting strengths in others can help to build better teams and foster relationships (“Bring out the best in others,” 2018).

- b. *Performing acts of kindness may lead to greater well-being, increased optimism, a sense of community, and development of social connections.*

While it is considered normal behavior for adolescents to be somewhat self-focused, this behavior has also been associated with a number of conditions including depression, anxiety, and loneliness (Penn & Witkin, 1994). Doing something for someone else is a great way to turn focus away from one’s self and towards the needs of others. When we help someone less fortunate, it

helps us appreciate what we have and makes us feel part of the greater community (Lyubomirsky, 2007). Acts of kindness, small or large, when done intentionally, are associated with improved well-being (Buchanan & Bardi, 2010; Lyubomirsky, Sheldon, & Schkade, 2005). It is interesting to note that Lyubomirsky, Sheldon, & Schkade's (2005) research shows that performing five acts of kindness on one day each week, rather than a kind act each day, resulted in an increase in happiness. This may be due to the novelty of it only being done once each week. Those who performed a kind act each day may have adapted faster. For this reason, when encouraging students to perform acts of kindness, they should either be encouraged to batch them into a single day each week or perform a variety of acts throughout the week. If Resident Advisors (RAs) encourage students to share one thing they have done for someone else at a weekly meeting this may amplify the positive feelings and also encourage others to do the same.

iv. Fostering Resilience While Reducing Stress

Positive interventions are a great resource for building resilience and reducing stress in college students. This section offers some very basic, simple, low cost alternatives in addition to interventions that are more involved, require greater effort, and are costlier.

- a. *Conducting a gratitude circle can lead to greater well-being, increased optimism, social support, and reduced depression.*

One of the greatest opportunities to foster psychological well-being for students is in campus residence halls (Bowman, 2010). This provides a unique opportunity to help freshmen develop meaningful relationships as well as a sense of belonging. RAs could be trained to lead weekly meetings on each floor or hallway. A gratitude circle would be an opportunity for each member of the group to share something that happened in the prior week for which they are grateful. Expressing gratitude is one of the easiest ways to develop a positive orientation towards

life. In addition, there is considerable evidence that gratitude is a predictor of well-being, leads to higher levels of perceived social support, and can substantially reduce depressive symptoms (Mofidi, El-Alayli, & Brown, 2014; Wood, Maltby, Gillett, Linley, & Joseph, 2008).

- b. *Writing in a gratitude journal may lead to greater life satisfaction, increased optimism, greater connection, and better sleep.*

As part of freshmen orientation, the college could provide a small journal to each freshman student. Students should be encouraged to write down three things that they are grateful for each day. Alternatively, they could record five things each week. There is evidence that those who keep a gratitude journal are more optimistic, feel better about their lives, and are more connected with others (Duckworth, Steen, & Seligman, 2005). Gratitude is also related to many aspects of better sleep quality including duration, sleep latency, and sleep efficiency (Wood, Joseph, Lloyd, & Atkins, 2009).

- c. *Offering regular mindfulness sessions can improve cognitive function, sleep quality, focus, and immunity and may also reduce distractibility, anxiety, and stress.*

The concept of mindfulness has become the subject of great interest and much research since the turn of the century (Smalley & Winston, 2010). Mindfulness meditation began over 2,500 years ago as a Buddhist practice but became more mainstream in the mid-twentieth century as a way to reduce stress and improve well-being (Wheeler, Arnkoff, & Glass, 2017). While there are many styles of meditation, during mindfulness meditation one observes a variety of sensations and thoughts without judgment. The intention is to be fully present and aware of the experience as you are having it (Smalley & Winston, 2010). Those more experienced at this practice show reduced activity in the amygdala and insular cortex of the brain where anxiety resides (Ricard, Lutz, & Davidson, 2014).

In addition to stress reduction, mindfulness meditation has been shown to improve sleep and reduce symptoms associated with depression (Ricard et al., 2014). Mindfulness meditation has been shown to have many positive effects including an enhanced immune system, better concentration and working memory, reduced anxiety, and more focus (Galante et al., 2016; Murphy, Mermelstein, Edwards, & Gidycz, 2012; Smalley & Winston, 2010). Holding 30-minute mindfulness classes throughout campus on a regular basis can make these benefits accessible to students between classes or when they need a moment to step back from everything. It would be great to have RAs trained in mindfulness so that programs could also be offered in residence halls.

- d. *Offering an 8-week mindfulness program or for-credit meditation course can improve cognitive function, sleep quality, focus, and immunity and may also reduce distractibility, anxiety, and stress.*

There is evidence to suggest that an eight-week mindfulness course or a full semester, for-credit meditation class, can significantly reduce student anxiety and stress (Galante et al., 2017; Penberthy et al., 2016). A for-credit class that is graded may provide additional motivation and accountability for students to take the material and learning more seriously (Shatkin et al., 2016). While it may be more difficult to attract a large number of students due to the time commitment, these programs have shown to increase self-reported mindfulness, self-compassion, and coping skills while also reducing anxiety (Galante et al., 2017; Penberthy et al., 2016).

- e. *Offering an 8-week resilience program or for-credit meditation course can help to develop a growth mindset and optimistic explanatory style and may also reduce symptoms of anxiety and depression.*

As mentioned above, a for-credit class might provide additional motivation and accountability for students to take the material and learning more seriously (Shatkin et al., 2016). A meta-analysis of resilience training programs showed mixed results. Leppin et al (2014) suggest that this is due in part to the wide range of interventions and lack of a single accepted framework for the development or application of these programs. That being said, research suggests that interventions can improve resilience, particularly in an academic setting (Shatkin et al., 2016).

If a for-credit course is not possible, this could be offered as an eight-week course that is not for credit. In the early 1990s a study was done at Penn to evaluate the impact of an eight-week, 16-hour prevention and resiliency workshop. The program was held for undergraduate students who, based on their explanatory style, were at greater risk for depression and anxiety (Seligman, Schulman, DeRubeis, & Hollon, 1999). The results were very promising: the participants had significantly fewer episodes of anxiety and exhibited greater improvements in explanatory style, hopelessness, and maladaptive attitudes than the control group. A similar study, also with Penn students, was repeated in 2006 with even stronger positive results (Seligman et al., 2007).

It is possible that an optimistic explanatory style can become pessimistic when circumstances change (M. Seligman, personal communication, December 10, 2017). Based on this consideration, it may be useful to consider this program for all students rather than only selecting those considered to be “at risk.” If an explanatory style can improve from pessimistic to optimistic, there are likely to be students who begin with an optimistic explanatory style but, being in a new, hyper-competitive environment, encounter a shift. If their explanatory style veers towards pessimistic this can be an indicator of risk for depression. It may be beneficial if some

version of this program began at freshman orientation and carried through the first semester. One suggestion would be to have an introductory two-hour workshop followed by small freshman seminars that would give the students an opportunity to engage with each other and the material in a less intimidating, more intimate setting.

- f. *Administering a stress mindset intervention can help students view everyday stress as a challenge, not a threat, which may improve academic achievement, help them develop a growth mindset, and reduce anxiety.*

Stress is neither all good nor all bad. There are certainly times when stress is necessary to enable us to respond appropriately to a crisis situation. How we perceive everyday stress, however, can have a great impact on our health and performance. A stress mindset describes an individual's view on stress as either enhancing or detrimental (Crum, Salovey, & Achor, 2013). A brief intervention, as simple as showing a short video supporting the benefits of stress, can shift someone to a stress-is-enhancing mindset (Jamieson, Nock, & Mendes, 2012; McGonigal, 2015). Research indicates that a stress-is-enhancing mindset leads to better performance, greater academic achievement, and reduced anxiety (Crum et al., 2013; Jamieson, Mendes, Blackstock, & Schmader, 2010; Jamieson et al., 2012; Jamieson, Peters, Greenwood, & Altose, 2016; McGonigal, 2015; Seery, Weisbuch, Hetenyi, & Blascovich, 2010; Strack & Esteves, 2015). A short video explaining some of the benefits of stress and how it can enhance performance could be delivered to a large group or accessed online. This could help shift students with a stress-is-detrimental mindset to a healthier stress-is-enhancing mindset.

- g. *Coordinating attributions retraining, or an explanatory style intervention, can improve academic achievement, help to enhance a growth mindset and optimistic explanatory style and may also reduce symptoms of anxiety and depression.*

Optimistic students are more likely to graduate and obtain higher GPAs (Solberg Nes, Evans, & Segerstrom, 2009). There is also evidence that optimists develop better coping strategies for responding to challenges and stressful situations (Chemers, Hu, & Garcia, 2001; Solberg Nes & Segerstrom, 2006). Attributional retraining can be a one-time intervention. By having freshmen view recordings of successful upperclassmen discussing how they overcame failure, they are exposed to the idea that initial disappointments can help improve future performance. The videos would emphasize that what the students initially perceived as a lack of ability changed as they developed better study habits and used the college support system. Viewing these videos is correlated with higher GPA and greater retention rates (Perry, Hechter, Menec, & Weinberg, 1993).

- h. *Holding a time management workshop can help reduce procrastination, stress, and anxiety.*

Some incoming students, perhaps due to the ‘helicopter’ parenting mentioned earlier, may lack autonomy (Schiffrin et al., 2014) and be less capable of effectively managing their time. Some students find regulating their self-study challenging (van der Meer, Jansen, & Torenbeek, 2010). Good time management skills should not be overlooked, as they can be used as a strategy to reduce feelings of stress (Häfner, Stock, & Oberst, 2015). A workshop designed to teach students about planning, prioritizing, goal setting, strategy development, and monitoring can increase students’ perception of their control of time resulting in less stress (Häfner et al., 2015). A time management workshop could also discuss the downside of procrastination – while they may feel less stress initially, procrastinators feel greater stress towards the end of the semester, receive lower grades, and have poorer health (Tice & Baumeister, 1997). It is important to acknowledge that there is not a one-size-fits-all approach to time management. A

good time management workshop offers a variety of systems from which to choose so that students can find an appropriate fit based on their individual needs and preferences.

v. Creating Better Social Support Systems

Today's students, particularly those in Generation Z, may be coming from homes where parents have been overly involved. As mentioned earlier, "helicopter parenting" has been correlated with lower psychological well-being and less autonomy (Schiffrin et al., 2014). To build resilience and independence, today's college students may find benefit in developing multiple supportive relationships with adults who can provide guidance and advice without being overly directive.

- a. *Establishing a mentoring program may increase social support, a sense of belonging and student retention.*

Of the students attending universities in the US; about 25-30% do not return to the institution where they began for the second year (Rausch & Hamilton, 2006). Studies indicate that receiving support from family and friends at the start of college is correlated with a students' commitment to graduate (Strom & Savage, 2014). As mentioned earlier, students who could identify five or more safe adults they could turn to, experienced greater well-being in multiple areas (including less stress, greater life satisfaction, elevated emotional intelligence, and less drinking of alcohol) (Whitney, 2010). Depending on the size of the university and the teacher to student ratio, creating a mentoring program that would match an adult to an incoming freshman may provide the additional support needed. If a school is unable to allocate the resources to accommodate all students, it may be best to target those students who may be at greater risk (minority, international, and first generation). Parameters for the program should outline frequency and duration of meetings as a guideline.

- b. *Training resident advisors to be more involved may help improve student well-being by increasing a sense of belonging, providing social support, and helping to develop a growth mindset.*

Resident Advisors (RAs) are in a unique position to serve as both a peer and advisor to freshmen students. By coordinating social gatherings and group discussions RAs can help students bond with and learn from each other. Some of the suggested interventions like the gratitude circle, discussion around the common read, and performing acts of kindness can be reinforced and facilitated by RAs. In some colleges, RAs are viewed as watchdogs who are there to supervise students and restrict inappropriate behavior, like drinking. These resident advisors, however, provide an opportunity to bolster student well-being, particularly during freshman year, when these young adults are most vulnerable. Perhaps the role of the RA should be re-imagined. Through proper training and guidance, RAs can serve to enhance a sense of belonging and community among the students.

D. Measuring Success

“What gets measured gets managed” (Willcocks & Lester, 1996, p. 279). Academic institutions often rely on research and data when making decisions about programs. In addition, strong empirical evidence can sometimes help when requesting funds for a particular program. Fortunately, over the past few decades, the field of positive psychology has created a number of measurement tools that can help in determining the effectiveness of interventions. It is strongly recommended to measure before and after interventions to gauge their effectiveness. The measures listed below are self-reported which can make them somewhat less reliable, but it is difficult to objectively measure well-being. It is sometimes helpful to have more than one

measure to confirm consistency in reporting. The five measurement tools listed below have been well-tested and are validated psychometric tools.

- Positive and Negative Affect Schedule (PANAS; Watson, Clark, & Tellegen, 1988)

The PANAS scales measures positive and negative affect through two 10-item mood scales that are internally consistent and largely uncorrelated.

- Scale of Positive and Negative Experience (SPANE; Diener et al., 2010)

Similar to PANAS in that it measures positive and negative feelings but differentiates itself in the ability to reflect a wider range of arousal to capture a broader range of feelings.

- Satisfaction with Life Scale (SWLS; Larsen, Diener, & Emmons, 1985)

A good measure of overall life satisfaction.

- PERMA (Kern, Waters, Adler, & White, 2015; Seligman, 2011)

Measures five key elements of well-being: positive emotions, engagement, relationships, meaning, and accomplishment.

- Grit Scale (Duckworth & Quinn, 2009)

Measures one's perseverance and passion for long-term goals.

These tools can be used in addition to commonly available data such as GPA and retention rates.

For additional measurement tools, surveys and positive psychology resources, please visit the following websites:

Authentic Happiness: <https://www.authentichappiness.sas.upenn.edu>

VIA Institute on Character: <http://www.viacharacter.org/www/>

Positive Psychology Center: <https://ppc.sas.upenn.edu>

Positive Psychology Program: <https://positivepsychologyprogram.com>

E. What's Happening on Campuses Today

With over 17 million undergraduate students on college campuses in the US, it is no surprise that there has been an increase in efforts focused on bolstering student well-being. Universities are investing more time and resources into a variety of wellness programs. In an attempt to better understand the depth and breadth of some of these existing programs, I reached out to nine universities who appear to be at the forefront of these efforts and The Kern Family Foundation. My list is far from comprehensive, but the information from these sources provides some valuable insights. Most of my interviews were conducted in person or by phone; additional information was collected via email exchanges and from published websites. I inquired about programs underway, what has and has not been working well, and what are perceived to be the key elements in successfully enhancing student well-being. A discussion of programs underway, by school, can be found in Appendix B.

Current programs range from small groups to entire campuses, voluntary to compulsory, and non-credit electives to full credit courses. It may seem surprising that colleges are not taking a more aggressive role in providing well-being programs on campus. However, it would be naïve not to acknowledge that colleges and universities are institutions with conflicting priorities. Bureaucracy, budgetary constraints, and tensions between administrators and faculty are often a sobering reality that create obstacles to moving forward.

i. Campus Efforts to Enhance Well-Being

Based on my research and informal interviews, I learned of some notable programs currently taking place on college campuses. Although a lack of resilience among current students is one of the greatest areas of concern, classes intended to build resilience and enhance well-being are often optional and not for credit. As a result, only a small percentage of the student

population participates. Some schools offer for-credit classes in positive psychology and/or resilience (Yale, George Mason University, University of Pennsylvania, New York University). These classes attract a large number of students, which is an indication that the students themselves view this as a need and are interested in self-improvement and well-being. According to an article in *The New York Times*, The Psychology and the Good Life class, taught at Yale in the Spring of 2018, had the highest enrollment of any class in the university's history, with almost 1,200 students (Shimer, 2018). Yet, the instructor, Dr. Santos, is quoted as saying "large courses can be amazing every once in a while, but it wouldn't be fair to other courses and departments to take all of their students away." She added, "It causes conflict, and we can't afford to offer this every year" (Shimer, 2018). It appears that Yale has chosen not to continue offering this class.

One emerging initiative to watch is the Campaign for Wellness at The University of Pennsylvania. This campus-wide program encompasses many dimensions of wellness, including emotional, physical, mental, social, sexual, spiritual, financial, and occupational. The initiative was launched by an event in the Fall of 2017 that invited all students, faculty and staff to an open conversation about stressors in today's world. In addition to the University President and Provost sharing personal stories of suffering, discussions included concern over mental health on campus, the impact of natural disasters, and worry over changes in government policies on immigration status (L. Charney, personal communication, April 10, 2018). The initiative includes a website that now serves as a central resource for wellness and added support at the counseling and psychological services department. While these efforts are still relatively new, Penn has created an advisory group of students, faculty and staff throughout the university that should help provide the insight and input needed to create effective programs to enhance well-

being (L. Charney, personal communication, April 10, 2018). The inclusion of representatives from Penn's Positive Psychology Center will enable them to access the most recent scientific research on positive psychology and interventions that may be helpful. The support shown from the senior leadership increases the likelihood of this program's success.

George Mason University (GMU) has emerged as a leader in incorporating positive psychology university-wide and has declared its intention to be the first well-being university ("Center for the Advancement of Well-Being," 2018). The university's 10-year strategic plan includes well-being and, to reinforce this as a priority, the Gallup Strengths-Finder assessment is made available to all students and employees to help them identify their strengths (N. Lucas, personal communication, December 20, 2017). Since 2010, GMU has held the Leading to Well-Being Conference which has attracted federal agencies, businesses, and leaders in the field of education. This conference has attracted some of the pioneers and leading researchers in the field of positive psychology including Chris Peterson, Martin Seligman, Barbara Frederickson, Tom Rath, and Sonja Lyubomirsky.

Very few schools have mandatory programming around the topic of well-being. Although not focused on well-being, one interesting model that combines both mandatory and voluntary participation is the Emory Integrity Project, which is funded by a three-year grant from the John Templeton Foundation. The purpose of the Integrity Project is to deepen and strengthen the culture of integrity at the university ("Emory Integrity Project," n.d.). Incoming freshmen are required to read a common book, attend an orientation session, and participate in a mandatory health class. The concepts of integrity and ethics are then woven throughout the curriculum, student activities, sports, and residence halls so that the common value and language of integrity is pervasive throughout the university (P. Wolpe, personal communication, January 24, 2018).

While I have only highlighted a few programs, there are many more initiatives under way on a variety of campuses throughout the US that show great promise. While I have only had the opportunity to speak with representatives from a handful of schools, I am certain there are many other valuable programs of which I am currently unaware. Appendix B provides greater detail on the programs described above as well as some others.

ii. Positive Universities

Aristotle believed that the ultimate goal of the actions we take is to be happy. Through exercising virtuous behavior, he asserted, individuals can experience eudaimonia (happiness) (Melchert, 2002). If Aristotle was right and our purpose for being is to live life well, then this should be an area of primary focus for institutions of higher education (Pawelski, 2016). If well-being is the goal, then everyone involved at a college or university (administrators, faculty, advisors, etc.) should be asking “how does what I am doing contribute to human flourishing?” Traditionally, the humanities (art, literature, philosophy, history, music) provided much of the core curriculum for education (Pawelski, 2016). These subjects often explore and help to develop human flourishing. The recent emphasis on STEM coursework (science, technology, engineering, and mathematics) has de-emphasized the importance of an education in humanities (Pawelski, 2016). Is it possible that there is a correlation between the increased pressure on students to take STEM classes to be more employable and the increase in depression and anxiety on campus? Although we cannot fully explore this suggestion here, perhaps we should consider that re-introducing humanities as a path towards well-being can enhance human flourishing. This kind of shift could lead institutions in the direction of becoming positive universities.

Established colleges and universities that have been around for many years, may find it challenging to infuse positive psychology throughout all areas of the institution. Faculty, staff,

and administrators may be resistant to change (Caruth & Caruth, 2013; Chandler, 2013; Grama & Todericiu, 2016). To foster this kind of shift, however, one can look to a positive university, such as Universidad TecMilenio (TecMilenio), as an exemplar. TecMilenio, was founded in 2002 and is based in Monterrey, Mexico with close to 30 campuses and 56,000 students. In 2013, TecMilenio launched a new model for the university based on the science of positive psychology and focused on students' long-term well-being (Universidad Tecmilenio, 2018). All academic programs and student activities are built on an ecosystem of happiness and well-being. Positive psychology concepts such as purpose, positive leadership, well-being, and happiness are key elements of the university's 2020 strategic plan ("Plan 2020 Estrategico," 2018). Another helpful resource that can be used to build a positive university is The Positive and Mindful University report from the United Kingdom. This handbook provides an outline of considerations for students and staff in addition to suggestions on how to manage the transition to college (Seldon & Martin, 2017).

Conclusion – What Now?

This paper began with a discussion around some of the difficulties facing today's adolescents as they transition to college. These young adults are often confronted with physical, emotional, and mental challenges which may contribute to the bleak picture of the status of mental health on college campuses. With over 17 million undergraduates in the US, the number of students suffering from depression and anxiety (estimated at roughly 40-50%) is staggering (Reetz et al., 2016). While today's students, primarily members of Generation Z, are encountering some of the same college experiences as prior generations, there are some noticeable, relevant differences. From social media and technology use, to less in-person social interaction and over-involved parents, these students have had fewer opportunities to solve their

own problems during early childhood. As a result, they appear to have developed less resilience than previous generations.

While generational differences may play a role, highlighting these distinctions can aid in the development of relevant solutions. Many of today's college students suffer from a lack of self-care, concerns that they don't belong, tendencies towards perfectionism, a lack of resilience, and insufficient social support. Identifying these five distinct areas of concern, provides a starting point to focus attention. Research done in the field of positive psychology supports a variety of strategies that can enhance student well-being in all of these domains. Appendix A provides a chart summarizing the 22 proposed, evidence-based positive interventions, described in this paper, that may be used to bolster student well-being.

While campuses need to continue offering support for mental health, they can also shine a spotlight on interventions that provide protective factors against mental illness and offer programs that promote human flourishing. A combination of both compulsory and optional involvement in these interventions may provide the greatest impact on student well-being. A mandatory program provides an opportunity for students to have a common language around the topic of well-being and human flourishing. Since college is a time for exploration and self-determination, it is also important to offer students choices. By offering a variety of optional programs, students can select what is most relevant for them based on individual interest and need.

This paper has outlined a variety of positive interventions, backed by empirical evidence, that range in time commitment, effort, and resources. As discussed, the programs provided are merely suggestions; it is important that all interventions be customized for their intended audience. Accomplishment of small goals build on each other making it easier to achieve larger

goals (Smalley & Winston, 2010). If the ultimate goal is to improve student well-being on college campuses, the most important thing is to get started.

Note to Reader

When young people feel so helpless and hopeless that they take their own lives, it is truly tragic. While many schools have voiced concern and have begun creating programming around wellness, it is often very hard to locate these initiatives when you land on the university website home page. When colleges begin using prime website space to highlight well-being initiatives, it will be an indication to me of its true importance to university administrators.

The over-subscribed demand for the “Psychology and the Good Life” course at Yale is an indication that students care and want to improve their well-being. I find it extremely unfortunate and disappointing that Yale has chosen *not* to continue to offer this class; they are missing the opportunity to lead the way in helping college students flourish. It is unclear why the class could not be offered for smaller groups at various times to avoid scheduling conflicts with other classes.

My hope in writing this paper was to highlight many evidence-based ways in which student well-being can be enhanced. With a variety of actions that can be taken, some with minimal effort and cost, there is no reason for us to sit by any longer. My hope is that you have come to the end of this paper feeling empowered to make a change. I have suggested only a few of the many opportunities (big and small) to begin making a difference and positively impact student well-being.

When you read through the many suggestions for positive interventions, do any address the needs of students at your institution? Which do you feel are most likely to be implemented? Imagine the difference we could make if every campus committed to the implementation of one new intervention to improve student well-being each year. Before long, we could be shifting the college experience from an environment of surviving to one of thriving.

Appendix A - Positive Intervention Summary Chart

#	Intervention	Category	Description	Benefits
1	Breakfast Bar	Self-Care: Physical and Brain Health	Grab and go breakfast options in residence halls.	Better nutrition, increased academic performance.
2	More Movement	Self-Care: Physical and Brain Health	Encourage more movement: (a) standing desks (b) encourage use of stairs, (c) ask professors to offer movement breaks during long lectures, (d) allow and encourage students to stand in the back of the room during lectures.	Increased cognition, physical well-being.
3	Exercise Incentive Program	Self-Care: Physical and Brain Health	Track swipes of student ID; earn credit towards 'swag.' Also earn credits from social media posts.	Connection, physical well-being, increased cognition, stress reduction.
4	Sleep Incentive Program and Workshop	Self-Care: Physical and Brain Health	A short workshop (in person or an on-line tutorial) could provide specific strategies to enhance sleep quality. Use fitness tracking devices to monitor duration and quality of sleep. Offer incentives for longer, better sleep (fun T-shirt?)	Increased cognition, enhanced sleep hygiene, more sleep, greater physical well-being.
5	Quiet Residence Hall	Self-Care: Physical and Brain Health	A residence hall with a designated time when all residents are expected to be quiet makes it easier for students to benefit from a decent night's sleep without interruption.	Increased cognition, enhanced sleep hygiene, more sleep, greater physical well-being, enhanced social connection.
6	Better Sleep Through Less Blue Light	Self-Care: Physical and Brain Health	Amber glasses reduce the effect of blue light. Glasses could be offered to students who work on	Increased cognition, enhanced sleep hygiene, more

#	Intervention	Category	Description	Benefits
			their computer until late at night.	sleep, greater physical well-being.
7	Common Read	Belonging	Students read <i>UThrive: How to Succeed in College (and Life)</i> before orientation. Small breakout sessions with specific discussion topics.	Common language, resource to students, builds community, encourages diverse thinking, sense of belonging, opportunity to discuss well-being, academic achievement.
8	Volunteer & Activities Fair at Orientation	Belonging	A volunteer and activities fair during freshman orientation would provide an opportunity to connect with upper classmen as well as find a common interest with fellow classmates.	Belonging, greater well-being, building relationships, academic achievement.
9	A Brief Writing and Video Intervention	Belonging	Students have a mindset shift to believe the challenges experienced in transitioning to college are typical and will improve; feelings of not belonging are temporary.	Belonging, reduction in achievement gap.
10	Pre-Orientation Small Group Programs	Belonging	By offering a variety of programs (camping, community service, exploring the arts) students can pursue an interest while developing relationships.	Belonging, building relationships, social adaptation.
11	Strength Building & Strength Spotting	Self-Efficacy	A workshop on character strengths will enable students to identify their own strengths, learn to build on them, and recognize the strengths of their classmates.	Greater well-being, reduced depressive symptoms, enhanced relationships.

#	Intervention	Category	Description	Benefits
12	Acts of Kindness	Self-Efficacy	Encourage students to perform acts of kindness (batched in a given day or with enough variety each day that they don't succumb to adaptation). Resident Advisors (RAs) can lead weekly meetings where each member shares one thing they have done for someone else.	Greater well-being, increased optimism, a sense of community, development of social connection.
13	Gratitude Circle	Resilience and Stress Reduction	RAs can lead weekly meetings on each floor or hallway. A gratitude circle would be an opportunity for each member of the group to share something that happened in the prior week for which they are grateful.	Social support, improved well-being, reduced depression.
14	Gratitude Journal	Resilience and Stress Reduction	Students should be encouraged to write down three things that they are grateful for each day. Alternatively, they could record five things each week.	Increased optimism, greater life satisfaction, more connection, better sleep quality.
15	Regular Mindfulness Sessions	Resilience and Stress Reduction	30-minute classes throughout campus enables students to participate between classes. It would be great to have RAs trained in mindfulness so that programs could also be offered in residence halls.	Improved cognitive function, better sleep, boosted immunity, reduced distractibility, less anxiety, greater focus.
16	8-Week Mindfulness Program or For-Credit Meditation Course	Resilience and Stress Reduction	Can reduce anxiety and stress. It may be more difficult to attract many students due to time	Improved cognitive function, better sleep, boosted immunity, reduced

#	Intervention	Category	Description	Benefits
			commitment, but these programs increase self-reported mindfulness, self-compassion, and coping skills.	distractibility, less anxiety, greater focus.
17	8-Week Resilience Program or For-Credit Resilience Course	Resilience and Stress Reduction	Ideally, this would be a for-credit course. When motivated by grades, students may take the learning more seriously.	Growth mindset, optimistic explanatory style, reduced symptoms of depression, less hopelessness.
18	Stress Mindset Intervention	Resilience and Stress Reduction	Short video explaining benefits of stress and how it enhances performance can be delivered to large group or accessed online. Could help shift students with a stress-is-detrimental mindset to healthier stress-is-enhancing mindset.	View stress as a challenge, not threat, reduced anxiety, academic achievement, growth mindset.
19	Attributional Retraining/Explanatory Style Intervention	Resilience and Stress Reduction	One-time intervention. Freshmen view videos of upperclassmen; learn that initial failures improve future performance. Emphasize what students initially view as lack of ability changes as they develop better study habits and use college support system.	Academic achievement, growth mindset, optimistic explanatory style, reduced symptoms of anxiety and depression, higher retention rates.
20	Time Management Workshop	Resilience and Stress Reduction	Teach planning, prioritizing, goal setting, strategy, and monitoring to increase their perception of control of time. Also teach downside of procrastination –may feel less stress initially,	Reduced stress and anxiety, less procrastination.

#	Intervention	Category	Description	Benefits
			but procrastinators feel greater stress at end of semester, receive lower grades, and have poorer health.	
21	Mentoring Program	Better Social Support Systems	Match faculty with students and set parameters for frequency and duration of expected meetings. If unable to do this with all students, focus on at-risk students first (international students, minorities, first generation).	Belonging, social support, student retention.
22	Resident Advisor Involvement	Better Social Support Systems	Re-imagine the role of RAs from resident 'watchdog' to built-in support system for freshmen. May require additional training.	Belonging, social support, mindset.

Appendix B – Campus Conversations

As mentioned earlier in the paper, many college campuses have already started integrating programs to enhance student well-being. This appendix includes the notes from my research and conversations with The Kern Foundation and each of nine colleges. The following is a list of the foundation and colleges, in the order in which they appear in this Appendix, to guide your reading:

- Colorado State University
- Cornell University
- Emory University
- George Mason University
- The Kern Family Foundation
- New York University
- University of Miami
- The University of Oklahoma
- University of Pennsylvania
- University of Vermont

Colorado State University (CSU), Fort Collins, Colorado

CSU has instituted an impressive array of programs with minimal dedicated staff. By using both internal and external resources, CSU has rolled out programs from one-day workshops and a wellness app to public messaging that can be seen throughout campus on stickers and posters. I spoke with Viviane Ephraimson-Abt, Manager, Resiliency & Well-being Initiatives, CSU Health Network to learn more.

Viviane explained that during the 2013/2014 academic year, there were a number of suicides in residence halls. As with other colleges, the need for mental health services at CSU has been on the rise and additional resources have been allocated. Traditional counseling staff is supplemented with internships and psychology PhD candidates (V. Ephraimson-Abt, personal communication, February 14, 2018). The university has a strategic initiative to help students transition to college. The resilience and well-being initiatives are aimed at helping students understand what it means to build a successful life. The goal is to help them develop greater strength and coping skills, so they will be more resilient when facing a crisis. They view this as “upstream” thinking – teaching them to swim anticipating that they might fall into the water rather than rescuing them from drowning (V. Ephraimson-Abt, personal communication, February 14, 2018).

CSU went through a strategic planning process with 24 campus partners representing 16 departments (including public health, case management, medical docs, conflict resolution, student conduct, residence hall, positive psychology faculty). Before the process, there was a mindfulness program in place, which has since been expanded (V. Ephraimson-Abt, personal communication, February 14, 2018).

In 2016, CSU brought in a consultant to help with a growth mindset training. One-day training was led by an individual from Carol Dweck’s lab at Stanford. The program was targeted towards anyone working with students. The purpose was to train participants to encourage a growth and belonging mindset among students. Attendees included advisors, residence hall staff, faculty, student leaders, and peer mentors.

CSU is currently planning a psychosocial messaging intervention for incoming freshmen focused on what it means to transition to college. Students will receive the message that it’s

normal to feel overwhelmed, struggle to find your people, and feel socially awkward. They will develop a program aimed at reducing the achievement gap, risk of stereotype threat and not belonging. The intervention serves as a primer to change the mindset of incoming freshmen who may otherwise feel like the adversity they are experiencing is more permanent (Walton & Cohen, 2011). This intervention will be piloted this Spring so that the program can be rolled out this summer at orientation. CSU will use pre and post measures to determine the program's success. They are not planning to have control groups (they want all students to have the intervention) but will compare data to prior years before the intervention (V. Ephraimson-Abt, personal communication, February 14, 2018).

CSU has public messaging based on the PERMA model of well-being. One of these programs, Grow Your Happy, <http://health.colostate.edu/growyourhappy/>, has posters around campus and stickers that provide positive messaging. Posters are located throughout buildings, stickers are frequently seen on laptops and water bottles. The Grow Your Happy website has links to relevant information around well-being with information from other universities and lead researchers in the field of positive psychology. Another public messaging program, Fail Forward, <http://health.colostate.edu/ramsfailforward/>, provides an opportunity for students and the university community to change the conversation around failing. CSU is focusing on specific health goals including reduced shame and increased self-compassion. They are trying to create a culture of acceptance of failure as a necessary part of success. Both public message programs use animals instead of people. Through focus groups they found that if people are represented, students will look for someone that looks like them – this can create a diversity issue. Animals make people feel good; the response has been very positive (V. Ephraimson-Abt, personal communication, February 14, 2018).

The You CSU portal is a website and app, <https://you.colostate.edu>, that provides a range of mental health support services. The overarching theme is: Thrive – Matter – Succeed. The app is not just for mental illness support; it also provides career guidance, ways to build resilience, and strategies to enhance well-being. Students can take assessments and, based on their responses, the platform selects relevant content for the student. The app was built by Cactus Marketing (owned by a CSU grad). They started developing the app in 2014/2015. They had a soft launch in Fall 2015 and a full launch in 2016. Now they have 2 years of data (V. Ephraimson-Abt, personal communication, February 14, 2018).

Freshmen take both the satisfaction with life scale (SWLS) and Grit scale in October. If SWLS is low, students get contacted automatically. In the past, those who have responded and engaged are often in crisis, so this has been a useful screening tool. Second year students take a Thrive assessment. CSU will be looking at the trends of these assessments to gauge success of the interventions and messaging on campus (V. Ephraimson-Abt, personal communication, February 14, 2018).

Cornell University, Ithaca, NY

A conversation with Amanda Jeanne Carreiro, Dean of Becker House, provided insights into some of the wellness programs underway at Cornell University. Becker House is an on-campus residence hall that is a living and learning community. 400 students live in the hall as well as six PhD students and a faculty member (A.J. Carreiro, personal communication, December 20, 2017). There are about 30 additional faculty members associated with Becker House who volunteer, come for dinners and activities, and sometimes teach seminars. Blending academic and residential life helps to break down barriers and build relationships between students and faculty, which is an important element to student well-being and success

(Whitney, 2010). Carreiro partnered with the Health Center to create a six-week, non-credited course on resilience. The pilot had 12 students and subsequently, the Health Center took the content to create 60 and 90 minute workshops. As a graduate of the Certification in Applied Positive Psychology Program (CAPP), Carreiro has an interest in bringing more positive psychology to Cornell. She has held meditation classes and has now created a one-credit Applied Positive Psychology class that will be held at Becker House. Her intent is to use assessment tools before and after the class to measure its effectiveness. She is primarily focused on helping students cultivate skills to maintain mental well-being (A. J. Carreiro, personal communication, December 20, 2017).

The Cornell Health Center offers some outreach programs for well-being. Notice and Respond is offered to students, faculty and staff and is intended to teach participants how to recognize signs of stress and distress and how to respond appropriately. They also have a program, Intervene, which helps students recognize when alcohol is impairing someone's decision-making abilities or when someone is acting in a biased or prejudiced manner (A. J. Carreiro, personal communication, December 20, 2017).

"Let's Meditate" sessions are held around campus to facilitate student meditation as well as "Let's Talk" drop-in counseling sessions at different locations on campus to reduce the stigma associated with making an appointment at the Health Center. There is an active student group, Cornell Minds Matter, which is focused on reducing the stigma associated with mental illness by shifting the conversation away from mental illness, towards mental health (A. J. Carreiro, personal communication, December 20, 2017).

Emory University, Atlanta, GA

As mentioned earlier in the paper, Emory University has a unique model in place for a campus-wide initiative. While it is focused on ethics and integrity, not well-being, their approach is unique and should be considered. The Integrity Project at Emory University was launched in the Fall of 2016, with funding from the Templeton Foundation. Paul Root Wolpe, Asa Griggs Candler Professor of Bioethics and Director, Center for Ethics, has been involved with the program since its conception. The purpose of the Integrity Project is to deepen and strengthen the culture of integrity at the university. While this is not specifically aimed at improving student well-being, the model is one that could work well for campuses trying to initiate programs related to culture. What makes the Integrity Project unique is the comprehensive array of programs and activities throughout the campus. Incoming freshmen have a common summer reading assignment, receive integrity programming during orientation, and take a required Health 100 course which includes an integrity-based curriculum. This sets the stage for a common language set of values on campus around these concepts (P. R. Wolpe, personal communication, January 24, 2018).

The message of integrity is reinforced through many optional activities, including ethics-related discussions with trained resident advisors and student leaders, story-telling, art and music on campus, the athletics integrity pledge program, and co-sponsored academic classes. The Ethically EnGaged Leaders (EEGL) program offers a certificate program and has been very successful in pairing 40-50 students and faculty mentors to further explore ethics in leadership. The success of the Emory Integrity Project is being measured by outside contractors (the University of Georgia and University of Iowa) with multiple means of assessment of a number of dimensions including areas like leadership and honesty. As they

receive feedback on the program, adjustments are being made. The Templeton grant provided funding for three years; the hope is that positive results will lead to additional funding (P. R. Wolpe, personal communication, January 24, 2018).

Some of best practices shared by Wolpe are as follows:

- Academics and Campus Life need to collaborate; you need buy-in from across the university.
 - Offer diverse programming. Each student needs to find what speaks to them based on their individual interests. It can't be a one-size-fits-all approach.
 - Create a language that is not too diverse or too eclectic. Make it simple and memorable.
 - Having the content incorporated into freshmen orientation provides a foundation to build on. If it can be incorporated into a required freshman class as well, that's even better.
- After that, provide a variety of experiences to reinforce the cultural value and let the students choose.
- It must be modeled from the top. The Emory Integrity Project got off the ground because the former university president (Wagner) and provost were advocates. The value needs to be integrated throughout the university; all participants need to be on-board and speaking the same language (P. R. Wolpe, personal communication, January 24, 2018).

George Mason University, Fairfax, VA

Earlier in this paper it was mentioned that George Mason University (GMU) intends to become the first well-being university, "providing a place for all members of our Mason community in an environment where they can personally thrive while contributing to the overall mission" ("Center for the Advancement of Well-Being," 2018). The university defines well-being as "building a life of vitality, purpose, resilience, and engagement." The

university's vision is "to impact 10 million people in 10 years by teaching the science and practices that lead to a life of vitality, purpose, and resilience" ("Center for the Advancement of Well-Being," 2018). A conversation with Nance Lucas, the Executive Director of George Mason's Center for Advancement of Well-Being (The Center) provided additional insights. Now, over three years into a 10-year strategic plan which includes well-being, GMU has engaged the Gallup organization to evaluate qualitative feedback from undergraduate students and alumni in the Spring of 2018. This will help measure the results of their well-being initiatives. Self-reports from students show that they are more hopeful, more engaged, and believe that their time at George Mason University has contributed to their well-being (N. Lucas, personal communication, December 20, 2017).

Programs on campus include weekly well-being classes such as mindfulness meditation and yoga, special events like campus walks, mental health first aid training, and tai chi. Students can earn a minor in Consciousness and Transformation by taking two required classes: "Stress and Well-Being," and "Mindfulness, Meaning, and Well-Being," as well as two or three electives to be selected from over 20 offerings related to health, spirituality, consciousness, fitness, and well-being. These courses enable students to increase resilience, enhance problem solving skills, and explore a deepening sense of meaning and purpose (N. Lucas, personal communication, December 20, 2017).

The university also offers strength-based leadership certification programs for business leaders. Since 2010, they have held the Leading to Well-Being Conference which has attracted federal agencies, businesses, and leaders in education. Speakers at this conference have included: Chris Peterson, Martin Seligman, Barbara Frederickson, Tom Rath, Sonja

Lyubomirsky, Dr. David Rock, and Arianna Huffington (N. Lucas, personal communication, December 20, 2017).

George Mason University makes the Gallup Strengths-Finder assessment available to all students and employees to help them identify their strengths. Some classes incorporate strengths finder into their coursework. Lucas has found widespread support throughout the university for the well-being initiatives with no resistance. Now that there is awareness and commitment to well-being throughout the university, Lucas believes they are well poised for policy changes. Two programs she hopes to see implemented include: (a) allowing any employee to take 16 hours of leave each year to participate in activities at the university that will increase well-being; and (b) a requirement for all new students to take an on-line resilience course. They would be given ample time to finish it (one year), there will be no fee, and the class will offer no credit. However, the class will need to be completed to register for classes the following year. This would be the first compulsory initiative for well-being at the university (N. Lucas, personal communication, December 20, 2017).

Lucas believes the well-being initiative gained widespread acceptance because many faculty members in various departments (psychology, sociology, integrated studies, English, anthropology, community psychology) were already interested in this domain even before George Mason became a model of a well-being university (N. Lucas, personal communication, December 20, 2017).

Based on self-reports, Lucas says students are thriving more in their social well-being (sense of belonging and connectedness) although physical, purpose, and financial well-being have remained flat. The hope is that students will find greater meaning and purpose, increase

their resilience muscle, and have greater social support (N. Lucas, personal communication, December 20, 2017).

The Kern Family Foundation, Waukesha, WI

I am including a conversation with a consultant who is actively involved with The Kern Family Foundation to highlight broader initiatives taking place that include consortiums of colleges, not just individual schools. The Kern Family Foundation (The Foundation) is intentionally focused on “systematic change, rather than charity, by funding broad impact, long-term programs” that fall into one of four categories: good character, quality education, entrepreneurial mindset, and meaningful work. A conversation with Chris Stawski, a program and strategy consultant working with The Foundation, offered some insights into some of the programs being funded and how they are incorporating positive psychology concepts to enhance well-being and flourishing. Stawski is currently Chairman to the Advisory Board of the International Positive Education Network (IPEN). The aim of IPEN is to promote positive education by bringing together all stakeholders (teachers, parents, students, schools, charities, governments, and companies) to collaborate on improving the education through academics, character, and well-being (C. Stawski, personal communication, December 21, 2017).

Stawski is supporting The Foundation in their main categories of focus, mentioned above. One of the most promising initiatives is the “Network” which is a consortium of 17 university provosts and presidents. Participants in the Network include: Arizona State University, University of Virginia, University of Delaware, University of Southern California, Bucknell University, University of Texas at Austin, University of Rochester, University of Pittsburgh, University of Idaho, Embry-Riddle University, Washington University in St. Louis, Medical College of Wisconsin, Duke University, Wake Forest University, and Olin College of

Engineering. Spearheaded by Rick Miller, President of Olin Engineering School, the institutions that are part of the Network are all committed to meeting every six months to learn more about improving well-being on campus. The first meeting was held in June 2017 and featured Carol Dweck, who discussed mindset. The next meeting was held in January of 2018; Angela Duckworth spoke about Grit; Bill Burnett and Dave Evans discussed Designing Your Life. The Network has some members focusing on growth mindset as an avenue to well-being while others will be focusing on ethics and character as a route to well-being. All participants have committed to invest in and experiment with ways to enhance well-being on campus with the hope that they can create a model to share with others (C. Stawski, personal communication, December 21, 2017).

The university representatives in the Network acknowledge that there has been greater demand for mental health counseling on campus and are also concerned with the future role of brick and mortar campuses as the internet provides greater access to learning. For them to survive, they need to make sure they are offering a worthwhile experience that offers training in soft skills such as teamwork, and collaboration to enhance well-being. Stawski feels that this could be the perfect time and opportunity for disruptive innovation (C. Stawski, personal communication, December 21, 2017).

The Foundation is supporting another project that is also worth mentioning. They have made an investment of \$50 million to transform medical education to include character and well-being. This is part of an effort to address the increase in burnout, depression, anxiety and suicide among young doctors, residents, and medical students. The intent is to incorporate greater resilience into medical school training for both students and faculty at the seven participating medical schools, which include the Medical College of Wisconsin, Dartmouth,

Mayo Clinic and University of Texas at Austin) (C. Stawski, personal communication, December 21, 2017).

New York University, New York City, NY

New York University (NYU) is in the heart of New York City and has shown itself as a leader in finding ways to enhance student well-being. Following a series of on-campus suicides in 2003/2004, there was a spotlight on mental health on campus and the university made great efforts to provide more mental health services for students. Improvements included a 24-hour helpline, locking access points to locations considered dangerous, training resident advisors (RAs) in mental health prevention and an increase in the availability of on-campus resources. In addition, they created videos for incoming students that highlight the mental health services available (J. Shatkin, Personal Communication, December 18, 2017).

In 2006, Dr. Shatkin created a class entitled “How to Succeed in College,” which included topics like the importance of sleep, nutrition, and mindfulness. While the class was not research-based, the students enjoyed it. Rather than expand this program, NYU offered Dr. Shatkin the opportunity to build academic courses in adolescent mental health; his area of expertise. Shatkin created Child and Adolescent Mental Health Studies (CAMS) with a wide range of courses, including: Science of Happiness, Psychopathology, Children of Divorce, Literature of Children, While You Were Sleeping, Eating Disorders, and Anxiety Disorders. All classes are taught by practicing psychologists and psychiatrists associated with NYU and Bellevue Hospitals (J. Shatkin, Personal Communication, December 18, 2017).

Of particular interest is a course titled “Risk and Resilience in Urban Teens, Mental Health Promotion and Practicum.” This is a full-year, two-semester class. In the first semester, students learn about risk taking and decision-making as well as coping skills and optimistic

explanatory styles. In the second semester, they teach these skills to ninth-grade inner-city youth. There is evidence that the class resulted in a reduction in anxiety among the NYU students as well as an increase in coping skills (Shatkin et al., 2016). While there was a control group (students in a different psychology class), students self-selected to participate in the class so this was not a randomized trial. Shatkin et al. (2016) posit that as an in-class intervention they may have experienced greater success since students are accustomed to learning new content in this environment. Also, due to the nature of grades, it is possible that students may have exhibited greater effort and motivation than if this intervention was completely voluntary and ungraded (J. Shatkin, personal communication, December 18, 2017).

The results of this study, prompted NYU to create the Wellness Initiative at NYU (WIN) program. This program is a randomized, controlled trial. Incoming freshmen students can opt in to living in the WIN residence hall. The hall offers optional yoga, training, and meditation classes two or three times a week to the residents. Of the residents, a random selection is enrolled in a resilience course. Unlike the program described above, this class is a single semester and does not include the teaching piece that took place in the second semester. The resilience course is focused on five key elements based on Shatkin and his staffs' experience with teaching over 25,000 students in the past decade through the CAMS program. These key elements are: (a) relationships, (b) emotion regulation, (c) assertiveness and decision making, (d) competence and self-efficacy, and (e) general health including sleep, nutrition, and exercise (J. Shatkin, personal communication, December 18, 2017).

The study began in the Fall of 2017 with 60 students, of which 21 are enrolled in the resilience course. NYU will be tracking their GPA, retention, and time it takes to graduate. Dr.

Shatkin intends to continue the study with new students each year. His expectation is that the research will show that the class itself (rather than the amenities in the residence hall) will drive a reduction in stress and increase in resilience in the students participating (J. Shatkin, Personal Communication, December 18, 2017).

Science of Happiness is one of the classes offered to NYU undergrads through the CAMS program. This class was originally offered by Dr. Alan Schlechter in 2011 and then, beginning in 2012, was co-taught by Daniel Lerner, MAPP. The class has roughly 500 students each semester; ranging from freshmen to seniors. In addition to two 75-minute lectures each week, there are weekly recitations that meet in small groups of 25 to discuss and reflect on the material. On average, this class is being taught to close to 20% of the undergraduate student population. Currently, there are no measurements in place to capture changes in well-being due to taking the class but feedback from the students has been very positive and each semester the class is filled to capacity (D. Lerner and A. Schlechter, personal communication, January 25, 2018).

University of Miami, Miami, FL

While many universities have approached student well-being by offering programs exclusively for students, University of Miami has taken a community approach. The university community developed a set of common values, leadership expectations and service standards (University of Miami Office of Institutional Culture, 2015). What makes this unique is that staff at all levels were involved in the creation of these guiding principles. Using a bottom up approach engaged faculty and staff in forging a common purpose and set of values. Isaac Prilleltensky, Dean and Professor, Vice Provost for Institutional Culture at the University of Miami guided the university to create a culture of belonging by making sure staff and faculty

felt valued while also adding value. A Gallup survey done before and after this culture transformation process showed significant increases in engagement and inclusiveness which resulted in higher scores for overall well-being (I. Prilleltensky, personal communication, September 9, 2017).

With staff and faculty engagement greatly improved, Prilleltensky reports that the University of Miami is now turning the focus towards students. They are in the initial stages of creating an intergroup dialogue course for students. A measure is being developed to assess belonging among students and he expects that the course will be optional, and students will earn credit for their participation. He is hopeful to have more data in 2019 (I. Prilleltensky, personal communication, January 19, 2018).

The University of Oklahoma, Norman, Oklahoma

Much like Emory University is focused on integrity, The University of Oklahoma (OU) is focused on virtues. OU received grants from the John Templeton Foundation and the Stephenson Family Foundation that enabled the creation of the Institute for the Study of Human Flourishing (Institute) which opened in September, 2015. The mission of the Institute is three-fold: (1) improve the flourishing of students at OU, (2) advance the science of virtue, and (3) provide outreach programs to improve the flourishing of all Oklahomans (N. Snow, personal communication, February 27, 2018).

Programming falls into four main areas:

- Collaborative Programs: Includes the “Gateway to College Learning” course which uses a revised textbook that incorporates the nine OU virtues, Camp IMPACT (a volunteer Spring Break experience for freshmen), and a common read entitled “*This I Believe*,” a

compilation of essays written by a diverse group of authors. Students reflect on the book and write their own “This I Believe” essay.

- Course Development: OU faculty are incentivized to incorporate the OU virtues into their courses.
- Lectures: OU hosts a variety of lectures on the topic of virtues.
- Research: OU conducts research on virtue and flourishing and hosts academic conferences on topics related to virtue (“Institute for the Study of Human Flourishing,” n.d.).

Of the four main program areas, the “Gateway to College Learning” has had the most success. There have been 1,500 students a year in 95 sections of the course which has a focus on teaching the nine virtues adopted by the university. They are currently waiting to hear if they will receive additional funding from The John Templeton Foundation when the current grant expires in August, 2018 (N. Snow, personal communication, February 27, 2018).

University of Pennsylvania, Philadelphia, PA

The University of Pennsylvania (Penn) is home to the Positive Psychology Center (Martin E.P. Seligman, Director, is often thought of as the Founding Father of Positive Psychology). The Positive Psychology Center (PPC) is actively involved in numerous activities around human flourishing including research, training, and administering the Master of Applied Positive Psychology program (MAPP). Like other institutions, Penn has also experienced an increase in student suffering from stress, depression and anxiety.

Over the past year, great strides have been made to create a framework to support university-wide initiatives to improve wellness. A conversation with Leo Charney, Executive Director of Communications for the Office of the Provost provided some insights. The first

phase of this campaign took place in the Fall of 2017 when campus leadership held a “Campus Conversation.” An email to the Penn community invited students, faculty, and staff to join a discussion that addressed concerns such as mental health on campus, the impact of recent natural disasters and uncertainties for students that may be affected by changes to government policies on immigration. The program which featured both the University President and Provost sharing personal stories of hardship with the audience (L. Charney, personal communication, April 10, 2018). A second “Campus Conversation” was held in early April, 2018. Unlike the first event which was led by school administrators, this event was a student-led initiative. The event kicked off mental wellness week.

Shortly after the Campus Conversation, in another community-wide email, University President, Amy Gutmann, announced two initiatives. The first was the commitment of additional resources to the Counseling and Psychological Services (CAPS) to hire five additional full-time staff members to expand hours and reduce wait times. In addition, the process and operations of the CAPS program is undergoing a full assessment (A. Gutmann, personal communication, November 20, 2017). Findings of this investigation are expected to be released prior to the end of the 2017-2018 academic year with more details of concrete initiatives to be released in the Fall. (L. Charney, personal communication, April 10, 2018). The second initiative was the launch of a Campaign for Wellness which will promote campus-wide initiatives including a website to serve as a central resource for the Penn community. The website launched in January, 2018 and highlights eight dimensions of well-being including emotional, physical, mental, social, sexual, spiritual, financial, and occupational wellness (“Wellness at Penn,” 2018). Focusing on many areas of well-being helps to shift the conversation away from only being about mental health. The website helps to communicate

that wellness is a priority for the Penn community (L. Charney, personal communication, April 10, 2018).

Another successful initiative that was re-introduced to the Penn community is the “Take your professor to lunch” program. It has existed for many years, but participation in recent years has been low. By more effectively publicizing the program, enrollment has surged and is expected to be five or six times what it has been in past years. This creates opportunities for students to build a trusting relationship with an adult on campus. It also enables the teachers to develop relationships with students outside of the classroom creating a stronger community overall (L. Charney, personal communication, April 10, 2018).

There are two advisory committees currently in place to assist with the Campaign for Wellness. The first was created by the University Provost, Wendell Pritchett, to seek input from senior leaders in the Penn community. This committee helped to launch the first phase of the initiative. A second, broader group, has now been assembled which includes undergraduate and graduate students as well as a wide range of faculty and staff from across the university. This ongoing committee will provide community-wide input into the development of specific programs to enhance wellness at Penn (L. Charney, personal communication, April 10, 2018).

While the Campaign for Wellness is a Penn community-wide initiative, there have been programs underway throughout campus that have been created more organically over the years. One of the more established programs to enhance well-being at Penn is The Penn Program for Mindfulness. This eight-week program was established by Dr. Michael Baime in 1992 to help patients with serious health conditions cope with pain and stress by using meditation-based techniques. Since its inception, the program has served tens of thousands of

individuals and is now open to anyone who is interested in finding a way to lead a more fulfilling life. In addition to being offered on the Penn campus, this program is offered at multiple locations throughout Philadelphia, Southern New Jersey, and the Philadelphia suburbs.

In the Spring of 2016, Faisal Kahn and Laura Taylor, alumni of the MAPP program, created an eight-week program entitled “Penn Program for Flourishing,” modeled after The Penn Program for Mindfulness. Kahn and Taylor share a common vision to increase student well-being without adding stress. The non-credited program is optional and open to everyone. Students need to register in advance (space is limited) and if they miss three classes, they are dropped from the program. Remarkably, the average attendance rate has exceeded 85% for the past two semesters. Data has been collected from the second semester (Fall, 2017) but has not yet been analyzed. Assessments of well-being were administered to the 25 participants before and after the program. Based on feedback, Kahn and Taylor modified the sessions to include less formal lecture and more activities to reinforce positive psychology concepts. So far, student feedback has been very positive, and they are hoping to expand the program in the future (L. Taylor, personal communication, December 19, 2017).

The Weingarten Learning Resource Center (Weingarten) provides academic support to all Penn students. In her role as Executive Director, Myrna Cohen has interacted with thousands of students over the years. In her experience, many “first-generation students” (defined as the first in their family to attend college) demonstrate greater resilience than their classmates because they have often had to overcome great adversity as children. However, they lack the parental support of many students since their parents have difficulty relating to their experience (Stephens et al., 2012). Cohen, as a first-generation student herself, tries to

offer programming that provides support for these students. In the Fall of 2017, she offered first generation students in the introductory economics and psychology classes, the opportunity to join a small study group limited to twelve students. She intended to offer one group for each class but was oversubscribed and needed to offer a second group for the economics students. She invited specialists from Weingarten to offer mini-workshops on study skills, time management, etc. to the study groups. The students expressed to Cohen that this environment also provided a safe place where they could ask “risky” questions they would be hesitant to ask in a typical class setting where they feel they would be judged harshly by their peers (M. Cohen, personal communication, December 19, 2017).

The issue of students lacking resilience is not specific to Penn. The Resilience Consortium was created in 2014 by ten elite universities (including Penn), to better understand and promote student resilience. Based on a similar program at Princeton University, a group of students initiated the Penn Faces program, www.PennFaces.Upenn.edu, in 2016. The term “Penn Face” is used to describe a typical student at Penn who, on the outside, appears happy and content, but on the inside, is overwhelmed, stressed, and anxious. The purpose of Penn Faces is to share authentic stories with the Penn community about challenges and frustrations. It is hoped that participants will recognize that they are not alone in many of the difficulties they experience; the website is there to offer engagement and support. The group running the Penn Faces program currently consists of five students, but the hope is that the program and outreach will grow (M. Cohen, personal communication, December 19, 2017).

A wide range of mental health services are available to Penn students through Counseling and Psychological Services (CAPS) at Penn. A conversation with William Alexander,

Director, and Meeta Kumar, Director of Outreach and Prevention, provided some insights into how Penn has been addressing the increased demand for mental health services on campus.

About 10 years ago, Penn created the I CARE program. This training is offered two or three times each semester, is free and open to all students, faculty, and staff and the university. After completing an on-line module, the I CARE program offers a three-hour experiential workshop focused on teaching participants how to understand mental health beliefs and biases and how to distinguish among stress, distress, and a crisis. Role playing helps to build support skills and teaches attendees how to engage with someone in need. Participants are educated about campus resources as well as how to engage in self-care. Participation in the program is voluntary for most but is required for some student leaders and is usually sold out. As a non-academic course, no credit can be offered for taking the class (B. Alexander, personal communication, December 19, 2017).

Finally, there are offerings through Campus Health and Student Health Service and Campus Recreation, including free weekly meditation sessions, free yoga sessions, workshops on nutrition and wellness as well as a new evidence-based sleep program, called Refresh (“Wellness at Penn,” 2018).

University of Vermont, Burlington, VT

Another university that has taken a lead role in seeking ways to bolster student well-being is the University of Vermont (UVM). In the Fall of 2015, UVM established WE (Wellness Environment) which is an opt in residence program that was created by Dr. Jim Hudziak, a UVM Lerner College of Medicine Professor and Chief of Child Psychiatry. The purpose was to create an environment to incentivize college students to build healthy brains and bodies based on four pillars of wellness: fitness, nutrition, mindfulness, and mentorship. The four WE

residence halls, housing close to 1,180 students, are substance free and have a zero-tolerance policy for drugs and alcohol (J. Rettew, personal communication, February 5, 2018).

About 75 percent of the WE community are freshmen; the remainder are upperclassmen. The program has grown from 120 students in the first year, to 480 in the second year, to the current enrollment of 1,180. Those who join WE are required to take the 3-credit course, *Healthy Brains, Healthy Bodies: Surviving and Thriving in College*. In the Fall of 2017, over 1,000 students were enrolled in this class across five sections (J. Rettew, personal communication, February 5, 2018).

Participants are offered the opportunity to work with fitness mentors to create goals and establish exercise plans. Fitness centers are conveniently located in the WE residences. UVM Masters of Science in Dietetics students are available to work with WE members to establish healthy eating habits. Mindfulness is taught to students in a healthy, non-judgmental environment, with daily mindfulness and yoga classes offered in the residence hall. Students are encouraged to utilize mindfulness practice to help reduce stress and aid in decision-making. Finally, students have an opportunity to mentor local youth. Recently, UVM introduced the WE App which serves to provide incentives to students as well as collect research data to aid in measuring the program's success. Points earned (coins) can be used to purchase WE logo items in the WE store. Students can also choose to minor in Behavioral Change Health Studies by taking additional course requirements (J. Rettew, personal communication, February 5, 2018).

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References

- American Psychiatric Association. Committee on Nomenclature, & National Conference on Medical Nomenclature (US). (1952). *Mental disorders: Diagnostic and statistical manual*. American Psychiatric Association, Mental Hospital Service.
- Baldwin, D. R., Towler, K., Oliver, M. D., & Datta, S. (2017). An examination of college student wellness: A research and liberal arts perspective. *Health Psychology Open*, 4(2), 205510291771956. <https://doi.org/10.1177/2055102917719563>
- Balon, R., Beresin, E. V., Coverdale, J. H., Louie, A. K., & Roberts, L. W. (2015). College mental health: A vulnerable population in an environment with systemic deficiencies. *Academic Psychiatry*, 39(5), 495–497. <https://doi.org/10.1007/s40596-015-0390-1>
- Bao, K. J., & Lyubomirsky, S. (2014). Making happiness last: Using the hedonic adaptation prevention model to extend the success of positive interventions. In S. M. Schueller & A. P. Parks (Eds.), *The Wiley Blackwell Handbook of Positive Psychological Interventions* (pp. 373–384). Chichester, United Kingdom: John Wiley & Sons, Ltd.
- Bates, A., & Bourke, P. Q. (2016). *2016 Your first college year survey*. Higher Education Research Institute at UCLA. Retrieved from <https://www.heri.ucla.edu/briefs/YFCY/YFCY-2016-Brief.pdf>
- Bhochhibhoya, A., Dong, Y., & Branscum, P. (2017). Sources of social support among international college students in the United States. *Journal of International Students*, 7(3), 671–686.
- Blau, G., DiMino, J., DeMaria, P. A., Beverly, C., Chessler, M., & Drennan, R. (2016). Social connectedness and life satisfaction: Comparing mean levels for 2 undergraduate samples and testing for improvement based on brief counseling. *Journal of American College*

- Health*, 64(8), 585–592. <https://doi.org/10.1080/07448481.2016.1207645>
- Bowman, N. A. (2010). The development of psychological well-being among first-year college students. *Journal of College Student Development*, 51(2), 180–200.
<https://doi.org/10.1353/csd.0.0118>
- Brown, K. W., & Ryan, R. M. (2015). A self-determination theory perspective on fostering healthy self-regulation from within and without. In S. Joseph (Ed.), *Positive psychology in practice: Promoting human flourishing in work, health, education, and everyday life* (2nd ed., pp. 139–158). Hoboken, NJ: Wiley.
- Buchanan, K. E. & Bardi, A. (2010). Replications and refinements: Acts of kindness and acts of novelty affect life satisfaction. *The Journal of Social Psychology*, 150(3) 235-237.
- Caruth, G. D., & Caruth, D. L. (2013). Understanding resistance to change: A challenge for universities. *Turkish Online Journal of Distance Education*, 14(2), 12–21.
- Center for the Advancement of Well-Being. (2018). Retrieved from <https://wellbeing.gmu.edu>
- Centers for Disease Control and Prevention. (2017). Suicide among youth. Retrieved from <https://www.cdc.gov/healthcommunication/toolstemplates/entertained/tips/suicideyouth.html>
- Chandler, N. (2013). Braced for turbulence : Understanding and managing resistance to change in the higher education sector. *Management*, 3(5), 243–251.
<https://doi.org/10.5923/j.mm.20130305.01>
- Chellappa, S. L., Steiner, R., Oelhafen, P., Lang, D., Götz, T., Krebs, J., & Cajochen, C. (2013). Acute exposure to evening blue-enriched light impacts on human sleep. *Journal of Sleep Research*, 22(5), 573–580. <https://doi.org/10.1111/jsr.12050>
- Chemers, M. M., Hu, L., & Garcia, B. F. (2001). Academic self-efficacy and first year college

- student performance and adjustment. *Journal of Educational Psychology*, 93(1), 55–64.
<https://doi.org/10.1037//0022-0663.93.1.55>
- Clance, P. R., & Imes, S. A. (1978). The imposter phenomenon in high achieving women: Dynamics and therapeutic intervention. *Psychotherapy: Theory, Research & Practice*, 15(3), 241–247. <https://doi.org/10.1037/h0086006>
- Cohen, S., Doyle, W. J., Turner, R., Alper, C. M., & Skoner, D. P. (2003). Sociability and susceptibility to the common cold. *Psychological Science*, 14(5), 389–395.
<https://doi.org/10.1111/1467-9280.01452>
- Crum, A. J., Salovey, P., & Achor, S. (2013). Rethinking stress: The role of mindsets in determining the stress response. *Journal of Personality and Social Psychology*, 104(4), 716–733. <https://doi.org/10.1037/a0031201>
- Csikszentmihalyi, M. (1990). *Flow: The psychology of optimal experience*. New York, NY: HarperPerennial.
- Cukrowicz, K. C., Schlegel, E. F., Smith, P. N., Jacobs, M. P., Van Orden, K. A., Paukert, A. L., ... Joiner, T. E. (2011). Suicide ideation among college students evidencing subclinical depression. *Journal of American College Health*, 59(7), 575–581.
<https://doi.org/10.1080/07448481.2010.483710>
- Curran, T., & Hill, A. P. (2017). Perfectionism is increasing over time: A meta-analysis of birth cohort differences from 1989 to 2016. *Psychological Bulletin*.
<https://doi.org/10.1037/bul0000138>
- Daugherty, T. K., & Hayes, M. W. (2012). Social and academic correlates of reading a common book. *The Learning Assistance Review*, 17(2).
- Diener, E., & Seligman, M. E. P. (2002). Very happy people. *Psychological Science*, 13(1), 81–

84. <https://doi.org/10.1111/j.1467-9639.1991.tb00167.x>

Diener, E., Wirtz, D., Tov, W., Kim-Prieto, C., Choi, D. won, Oishi, S., & Biswas-Diener, R.

(2010). New well-being measures: Short scales to assess flourishing and positive and negative feelings. *Social Indicators Research*, 97(2), 143–156.

<https://doi.org/10.1007/s11205-009-9493-y>

National Center for Education Statistics. (2016). Digest of Education Statistics. Retrieved from

https://nces.ed.gov/programs/digest/d16/tables/dt16_105.20.asp?current=yes

Djonlagic, I., Rosenfeld, A., Shohamy, D., Myers, C., Gluck, M. A., & Stickgold, R. (2009).

Sleep enhances category learning. *Learning & Memory*, 16(12), 751–755.

<https://doi.org/10.1101/lm.1634509>

Downs, A., Boucher, L. A., Campbell, D. G., & Polyakov, A. (2017). Using the WHO-5 well-

being index to identify college students at risk for mental health problems. *Journal of College Student Development*, 58(1), 113–117.

Downs, N. S., Alderman, T., Schneiber, K., & Swerdlow, N. R. (2016). Treat and teach our

students well: College mental health and collaborative campuscommunities. *Psychiatric Services*, 67(9), 957–963. <https://doi.org/10.1176/appi.ps.201500465>

Drum, D. J., Brownson, C., Burton Denmark, A., & Smith, S. E. (2009). New data on the nature

of suicidal crises in college students: Shifting the paradigm. *Professional Psychology: Research and Practice*, 40(3), 213–222. <https://doi.org/10.1037/a0014465>

Duckworth, A. L., & Quinn, P. D. (2009). Development and validation of the Short Grit Scale

(Grit-S). *Journal of Personality Assessment*, 91(2), 166–174.

<https://doi.org/10.1080/00223890802634290>

Duckworth, A. L., Steen, T. A., & Seligman, M. E. P. (2005). Positive psychology in clinical

practice. *Annual Review of Clinical Psychology*, 1(1), 629–651.

<https://doi.org/10.1146/annurev.clinpsy.1.102803.144154>

DUI & DWI. (2018). Retrieved from <https://www.dmv.org/automotive-law/dui.php>

Dweck, C. (2008). *Mindset: The new psychology of success*. New York, NY: Ballantine Books.

Eisenberg, D., & Ketchen Lipson, S. (2017). *The Healthy Minds Study*. Retrieved from:

http://healthymindsnetwork.org/system/resources/W1siZiIsIjIwMTcvMDkvMTIvMTNfMjZfMDRfMTgzX0hNU19uYXRpb25hbC5wZGYiXV0/HMS_national.pdf

Eisenberger, N. I., & Lieberman, M. D. (2004). Why rejection hurts: A common neural alarm system for physical and social pain. *Trends in Cognitive Sciences*, 8(7), 294–300.

<https://doi.org/10.1016/j.tics.2004.05.010>

Eliasson, A. H., & Lettieri, C. J. (2010). Early to bed, early to rise! Sleep habits and academic performance in college students. *Sleep and Breathing*, 14(1), 71–75.

<https://doi.org/10.1007/s11325-009-0282-2>

Emory Integrity Project. (n.d.). Retrieved from <http://integrity.emory.edu/index.html>

Ferguson, M. (2006). Creating common ground: Common reading and the first year of college. *Peer Review: Emerging Trends and Key Debates in Undergraduate Education*, 8(3).

Gable, S. L., Impett, E. A., Reis, H. T., & Asher, E. R. (2004). What do you do when things go right? The intrapersonal and interpersonal benefits of sharing positive events. *Journal of Personality and Social Psychology*, 87(2), 228–245. <https://doi.org/10.1037/0022-3514.87.2.228>

Galante, J., Dufour, G., Benton, A., Howarth, E., Vainre, M., Croudace, T. J., ... Jones, P. B. (2016). Protocol for the mindful student study: A randomised controlled trial of the provision of a mindfulness intervention to support university students' well-being and

- resilience to stress. *BMJ Open*, 6(11). <https://doi.org/10.1136/bmjopen-2016-012300>
- Galante, J., Dufour, G., Vainre, M., Wagner, A. P., Stochl, J., Benton, A., ... Jones, P. B. (2017). Effectiveness of providing a mindfulness-based intervention to increase resilience to stress in university students: A pragmatic randomised controlled trial. *Lancet Public Health*, 2667(17), 1–10. [https://doi.org/10.1016/S2468-2667\(17\)30231-1](https://doi.org/10.1016/S2468-2667(17)30231-1)
- Grama, B., & Todericiu, R. (2016). Change, resistance to change and organizational cynicism. *Studies in Business and Economics*, 11(3), 47–54. <https://doi.org/10.1515/sbe-2016-0034>
- Häfner, A., Stock, A., & Oberst, V. (2015). Decreasing students' stress through time management training: an intervention study. *European Journal of Psychology of Education*, 30(1), 81–94. <https://doi.org/10.1007/s10212-014-0229-2>
- Healy, G., Dunstan, D. W., Salmon, J., Cerin, E., Shaw, J., Zimmet, P., & Owen, N. (2008). Breaks in sedentary time. *Diabetes Care*, 31(4), 661–666. <https://doi.org/10.2337/dc07-2046>. Abbreviations
- Hershner, S. (2016). Causes and consequences of sleepiness among college students. *Nature and Science of Sleep*, 6(April), 73–84. <https://doi.org/10.2147/NSS.S62907>
- Institute for the Study of Human Flourishing. (n.d.). Retrieved from <http://www.ou.edu/flourish.html>
- James, W. (1983). The gospel of relaxation. In *Talks to teachers on psychology* (pp. 117–119). Cambridge, MA: Harvard University Press.
- James, W. (1984). Habit. In *Principles of psychology: Briefer course* (pp. 125–138). Cambridge, MA: Harvard University Press.
- Jamieson, J. P., Mendes, W. B., Blackstock, E., & Schmader, T. (2010). Turning the knots in your stomach into bows: Reappraising arousal improves performance on the GRE. *Journal*

of Experimental Social Psychology, 46(1), 208–212.

<https://doi.org/10.1016/j.jesp.2009.08.015>

Jamieson, J. P., Nock, M. K., & Mendes, W. B. (2012). Mind over matter: Reappraising arousal improves cardiovascular and cognitive responses to stress. *Journal of Experimental Psychology: General*, 141(3), 417–422. <https://doi.org/10.1037/a0025719>

Jamieson, J. P., Peters, B. J., Greenwood, E. J., & Altose, A. J. (2016). Reappraising stress arousal improves performance and reduces evaluation anxiety in classroom exam situations. *Social Psychological and Personality Science*, 7(6), 579–587. <https://doi.org/10.1177/1948550616644656>

Katzmarzyk, P. T., Church, T. S., Craig, C. L., & Bouchard, C. (2009). Sitting time and mortality from all causes, cardiovascular disease, and cancer. *Medicine and Science in Sports and Exercise*, 41(5), 998–1005. <https://doi.org/10.1249/MSS.0b013e3181930355>

Kelley, P., Lockley, S. W., Foster, R. G., & Kelley, J. (2015). Synchronizing education to adolescent biology: “let teens sleep, start school later.” *Learning, Media and Technology*, 40(2), 210–226. <https://doi.org/10.1080/17439884.2014.942666>

Kern, M. L., Waters, L. E., Adler, A., & White, M. A. (2015). A multidimensional approach to measuring well-being in students: Application of the PERMA framework. *Journal of Positive Psychology*, 10(3), 262–271. <https://doi.org/10.1080/17439760.2014.936962>

Kessler, R. C., Amminger, G. P., Aguilar-Gaxiola, S., Alonso, J., Lee, S., & Ustun, T. B. (2007). Age of onset of mental disorders: a review of recent literature. *Current Opinion in Psychiatry*, 20(4), 359–364. <https://doi.org/10.1097/YCO.0b013e32816ebc8c>

Kilgo, C. A., Mollet, A. L., & Pascarella, E. T. (2016). The estimated effects of college student involvement on psychological well-being. *Journal of College Student Development*, 57(8),

1043–1049. <https://doi.org/10.1353/csd.2016.0098>

Kimberly, B., & James, P. (2009). Amber lenses to block blue light and improve sleep: A randomized trial. *Chronobiology International*, 26(8), 1602–1612.

<https://doi.org/10.3109/07420520903523719>

King, K. A., Tergerson, J. L., & Wilson, B. R. (2008). Effect of social support on adolescents' perceptions of and engagement in physical activity. *Journal of Physical Activity & Health*, 5(3), 374–384.

Kumar, S., & Jagacinski, C. M. (2006). Imposters have goals too: The imposter phenomenon and its relationship to achievement goal theory. *Personality and Individual Differences*, 40(1), 147–157. <https://doi.org/10.1016/j.paid.2005.05.014>

LaForge, M. C., & Cantrell, S. (2003). Explanatory style and academic performance among college students beginning a major course, 92, 861–865.

Lane, J. A. (2015). The imposter phenomenon among emerging adults transitioning into professional life: Developing a grounded theory. *Adulthood Journal*, 14(2), 114–128. <https://doi.org/10.1002/adsp.12009>

Larsen, R. J., Diener, E., & Emmons, R. A. (1985). An evaluation of subjective well-being measures. *Social Indicators Research*, 17(1), 1–17.

Leppin, A. L., Bora, P. R., Tilburt, J. C., Gionfriddo, M. R., Zeballos-Palacios, C., Duloher, M. M., ... Montori, V. M. (2014). The efficacy of resiliency training programs: A systematic review and meta-analysis of randomized trials. *PLoS ONE*, 9(10). <https://doi.org/10.1371/journal.pone.0111420>

Lund, H. G., Reider, B. D., Whiting, A. B., & Prichard, J. R. (2010). Sleep patterns and predictors of disturbed sleep in a large population of college students. *Journal of Adolescent*

- Health*, 46(2), 124–132. <https://doi.org/10.1016/j.jadohealth.2009.06.016>
- Lyubomirsky, S. (2007). *The How of Happiness: A scientific approach to getting the life you want*. New York, NY: The Penguin Press.
- Lyubomirsky, S., Sheldon, K., Schkade, D. (2005). Pursuing happiness: The architecture of sustainable change. *Review of General Psychology*, 9(2), 111-131.
- Maddux, J. E. (2009). Self-efficacy: The power of believing you can. In C. R. Snyder & S. J. Lopez (Eds.), *The Oxford Handbook of Positive Psychology* (2nd ed., pp. 335–343). New York, NY: Oxford University Press.
- <https://doi.org/10.1093/oxfordhb/9780195187243.013.0031>
- McAllum, K. (2016). Managing imposter syndrome among the “trophy kids”: creating teaching practices that develop independence in millennial students. *Communication Education*, 65(3), 363–365. <https://doi.org/10.1080/00000000.2012.000000>
- McGonigal, K. (2015). *The upside of stress: Why stress is good for you, and how to get good at it*. New York, NY: Penguin Random House.
- Melchert, N. (2002). *The great conversation: A historical introduction to philosophy, 4th ed.* Boston, MA: McGraw-Hill.
- Mofidi, T., El-Alayli, A., & Brown, A. A. (2014). Trait gratitude and grateful coping as they relate to college student persistence, success, and integration in school. *Journal of College Student Retention*, 16(3), 325–349. <https://doi.org/10.2190/CS.16.3.b>
- Mogilner, C., Chance, Z., & Norton, M. I. (2012). Giving Time Gives You Time. *Psychological Science*, 23(10), 1233–1238. <https://doi.org/10.1177/0956797612442551>
- Murphy, M. J., Mermelstein, L. C., Edwards, K. M., & Gidycz, C. A. (2012). The benefits of dispositional mindfulness in physical health: A longitudinal study of female college

- students. *Journal of American College Health*, 60(5), 341–348.
<https://doi.org/10.1080/07448481.2011.629260>
- Nadelson, S. G., & Nadelson, L. S. (2012). In search of the right book: Considerations in common read book selection. *Journal of College Reading and Learning*, 43(1), 60–66.
- Neal, D. T., Wood, W., & Quinn, J. M. (2006). Habits - A repeat performance. *Current Directions in Psychological Science*, 15(4), 198–202. <https://doi.org/10.1111/j.1467-8721.2006.00435.x>
- Oaten, M., & Cheng, K. (2006). Longitudinal gains in self-regulation from regular physical exercise. *British Journal of Health Psychology*, 11(4), 717–733.
<https://doi.org/10.1348/135910706X96481>
- Owen, N., Sparling, P. B., Healy, G. N., Dunstan, D. W., & Matthews, C. E. (2010). Sedentary behavior: Emerging evidence for a new health risk. *Mayo Clinic Proceedings*, 85(12), 1138–1141. <https://doi.org/10.4065/mcp.2010.0444>
- Pawelski, J. O. (2016). Bringing together the humanites and the science of well-being to advance human flourishing. In D. W. Harvard (Ed.), *Well-being and Higher Education: A Strategy for Change and the Realization of Education's Greater Purposes* (pp. 207–216). Washington, DC.
- Peach, H., Gaultney, J. F., & Gray, D. D. (2016). Sleep hygiene and sleep quality as predictors of positive and negative dimensions of mental health in college students. *Cogent Psychology*, 3(1), 1–12. <https://doi.org/10.1080/23311908.2016.1168768>
- Penberthy, J. K., Williams, S., Hook, J. N., Le, N., Bloch, J., Forsyth, J., ... Schorling, J. (2016). Impact of a tibetan Buddhist meditation course and application of related modern contemplative practices on college students' poligical well-being: a pilot study.

- Mindfulness*, 8(4), 911–919. <https://doi.org/10.1007/s12671-016-0665-y>
- Penn, M. L. & Witkin, D. J. (1994). Pathognomic versus developmentally appropriate self-focus during adolescence: Theoretical concerns and clinical implications. *Psychotherapy*, 31(2), 368–374.
- Perry, R. P., Hechter, F. J., Menec, V. H., & Weinberg, L. E. (1993). Enhancing achievement motivation and performance in college students: An attributional retraining perspective, 34(6), 687–723.
- Perry, R. P., Stupnisky, R. H., Daniels, L. M., Haynes, T. L., Perry, R. P., Stupnisky, R. H., ... Haynes, T. L. (2017). Attributional (explanatory) thinking about failure in new achievement settings, 23(4), 459–475.
- Peterson, C. (2006). *A Primer in Positive Psychology*. New York, NY: Oxford University Press.
- Peterson, C., & Barrett, L. C. (1987). Explanatory style and academic performance among university freshmen. *Journal of Personality and Social Psychology*, 53(3), 603–607. <https://doi.org/10.1037/0022-3514.53.3.603>
- Peterson, C., & Seligman, M. E. P. (2004). *Character strengths and virtues: A handbook and classification*. New York, NY: Oxford University Press.
- Phillips, G. (2005). Does eating breakfast affect the performance of college students on biology exams?. *Bioscene: Journal of College Biology Teaching*, 15–19. Retrieved from <http://files.eric.ed.gov/fulltext/EJ876514.pdf>
- Pilcher, J. J., & Walters, A. S. (1997). How sleep deprivation affects psychological variables related to college students' cognitive performance. *Journal of American College Health*, 46(3), 121–126. <https://doi.org/10.1080/07448489709595597>
- Plan 2020 Estrategico. (2018). Retrieved from <http://tecmlenio.mx/en/planestrategico2020>

- Rampersaud, G. C., Pereira, M. A., Girard, B. L., Adams, J., & Metz, J. D. (2005). Breakfast habits, nutritional status, body weight, and academic performance in children and adolescents. *Journal of the American Dietetic Association*, 105(5), 743–760.
<https://doi.org/10.1016/j.jada.2005.02.007>
- Rausch, J. L., & Hamilton, M. W. (2006). Goals and distractions: Explanations of early attrition from traditional university freshmen. *The Qualitative Report*, 11(2), 317–334.
- Reetz, D. R., Bershad, C., LeViness, P., & Whitlock, M. (2016). *The association for university and college counseling center directors annual survey*. Retrieved from
[https://www.aucccd.org/assets/documents/aucccd 2016 monograph - public.pdf?utm_source=Weekly+Snapshot%3A+October+4%2C+2017&utm_campaign=W+S+10%2F4%2F17&utm_medium=email](https://www.aucccd.org/assets/documents/aucccd%202016%20monograph%20public.pdf?utm_source=Weekly+Snapshot%3A+October+4%2C+2017&utm_campaign=W+S+10%2F4%2F17&utm_medium=email)
- Reivich, K., & Shatte, A. (2003). *The resilience factor: 7 keys to finding your inner strength and overcoming life's hurdles*. New York, NY: Broadway Books.
- Ricard, M., Lutz, A., & Davidson, R. J. (2014). Mind of the meditator. *Scientific American*, 311, 38–45. <https://doi.org/10.1038/scientificamerican1114-38>
- Schiffman, H. H., & Liss, M. (2017). The effects of helicopter parenting on academic motivation. *Journal of Child and Family Studies*, 26(5), 1472–1480. <https://doi.org/10.1007/s10826-017-0658-z>
- Schiffman, H. H., Liss, M., Miles-McLean, H., Geary, K. A., Erchull, M. J., & Tashner, T. (2014). Helping or hovering? The effects of helicopter parenting on college students' well-being. *Journal of Child and Family Studies*, 23(3), 548–557. <https://doi.org/10.1007/s10826-013-9716-3>
- Schulenberg, J. E., Johnston, L. D., O'Malley, P. M., Bachman, J. G., Miech, R. A., & Patrick,

- M. E. (2017). *Monitoring the future: National survey results on drug use, 1975-2016: Volume II, College students and adults ages 19-55*. Retrieved from <http://monitoringthefuture.org/pubs.html#monographs>
- Schwartz, A. J. (2006). College student suicide in the United States: 1990-1991 through 2003-2004. *Journal of American College Health*, 54(6), 341–352. <https://doi.org/10.3200/JACH.54.6.341-352>
- Schweitzer, A. L., Ross, J. T., Klein, C. J., Lei, K. Y., & Mackey, E. R. (2016). An electronic wellness program to improve diet and exercise in college students: A pilot study. *JMIR Research Protocols*, 5(1), e29. <https://doi.org/10.2196/resprot.4855>
- Seemiller, C., & Grace, M. (2016). *Generation Z goes to college*. San Francisco, CA: Jossey-Bass.
- Seery, M. D., Weisbuch, M., Hetenyi, M. A., & Blascovich, J. (2010). Cardiovascular measures independently predict performance in a university course. *Psychophysiology*, 47(3), 535–539. <https://doi.org/10.1111/j.1469-8986.2009.00945.x>
- Seldon, A., & Martin, A. (2017). *The Positive and Mindful University*. Oxford, UK. Retrieved from <http://www.hepi.ac.uk/2017/09/21/positive-mindful-university/>
- Seligman, M. E. P. (2006). *Learned Optimism: How to change your mind and your life*. New York, NY: Vintage Books.
- Seligman, M. E. P. (2011). *Flourish: A visionary new understanding of happiness and well-being*. New York, NY: Atria.
- Seligman, M. E. P., & Csikszentmihalyi, M. (2000). Positive psychology: An introduction. *American Psychologist*, 55(1), 5–14. <https://doi.org/10.1037/0003-066X.55.1.5>
- Seligman, M. E. P., Schulman, P., DeRubeis, R. J., & Hollon, S. D. (1999). The prevention of

depression and anxiety. *Prevention & Treatment*, 2(1). <https://doi.org/10.1037/1522-3736.2.1.28a>

Seligman, M. E. P., Schulman, P., & Tryon, A. M. (2007). Group prevention of depression and anxiety symptoms. *Behaviour Research and Therapy*, 45(6), 1111–1126.
<https://doi.org/10.1016/j.brat.2006.09.010>

Seligman, M. E. P., Steen, T. A., Park, N., & Peterson, C. (2005). Positive psychology progress: Empirical validation of interventions. *American Psychologist*, 60(5), 410–421.
<https://doi.org/10.1037/0003-066X.60.5.410>

Shakya, H. B., & Christakis, N. A. (2017). Association of facebook use with compromised well-being: A longitudinal study. *American Journal of Epidemiology*, 185(3), 203–211.
<https://doi.org/10.1093/aje/kww189>

Shatkin, J. P. (2017). *Born to be wild: Why teens take risks, and how we can help keep them safe*. New York, NY: TarcherPerigee.

Shatkin, J. P., Diamond, U., Zhao, Y., DiMeglio, J., Chodaczek, M., & Bruzzese, J. M. (2016). Effects of a risk and resilience course on stress, coping skills, and cognitive strategies in college students. *Teaching of Psychology*, 43(3), 204–210.
<https://doi.org/10.1177/0098628316649457>

Shimer, D. (2018, January 26). Yale's most popular class ever: Happiness. *New York Times*. Retrieved from <https://www.nytimes.com/2018/01/26/nyregion/at-yale-class-on-happiness-draws-huge-crowd-laurie-santos.html>

Sin, N. L., & Lyubomirsky, S. (2009). Enhancing well-being and alleviating depressive symptoms with positive psychology interventions: A practice-friendly meta-analysis. *Journal of Clinical Psychology: In Session*, 65(5), 467–487.

- Sliney, C. (2018, April 3). Penn's second 'Campus Conversation,' designed to highlight students, saw low student turnout. *The Daily Pennsylvanian*. Retrieved from <https://http://www.thedp.com/article/2018/04/second-campus-conversation-lack-of-turnout-ivy-league-upenn-mental-wellness-health>
- Smalley, S. L., & Winston, D. (2010). *Fully Present: The science, art, and practice of mindfulness*. Boston, MA: Da Capo Press.
- Smith, B. W., Tooley, E. M., Christopher, P. J., & Kay, V. S. (2010). Resilience as the ability to bounce back from stress: A neglected personal resource? *Journal of Positive Psychology*, 5(3), 166–176. <https://doi.org/10.1080/17439760.2010.482186>
- Smith, R. A., & Khawaja, N. G. (2011). A review of the acculturation experiences of international students. *International Journal of Intercultural Relations*, 35(6), 699–713. <https://doi.org/10.1016/j.ijintrel.2011.08.004>
- Solberg Nes, L., Evans, D. R., & Segerstrom, S. C. (2009). Optimism and college retention: Mediation by motivation, performance, and adjustment¹. *Journal of Applied Social Psychology*, 39(8), 1887–1912. <https://doi.org/10.1111/j.1559-1816.2009.00508.x>
- Solberg Nes, L., & Segerstrom, S. C. (2006). Dispositional optimism and coping: A meta-analysis. *Personality and Social Psychology Review*, 10(3), 235–251. https://doi.org/10.1207/s15327957pspr1003_3
- Steger, M. F., Kashdan, T. B., & Oishi, S. (2008). Being good by doing good: Daily eudaimonic activity and well-being. *Journal of Research in Personality*, 42(1), 22–42. <https://doi.org/10.1016/j.jrp.2007.03.004>
- Stephens, N. M., Townsend, S. S. M., Markus, H. R., & Phillips, L. T. (2012). A cultural mismatch: Independent cultural norms produce greater increases in cortisol and more

- negative emotions among first-generation college students. *Journal of Experimental Social Psychology*, 48(6), 1389–1393. <https://doi.org/10.1016/j.jesp.2012.07.008>
- Stickgold, R. (2015). Sleep on it! *Scientific American*, 52–57. Retrieved from <https://www.scientificamerican.com/article/how-snoozing-makes-you-smarter/>
- Strack, J., & Esteves, F. (2015). Exams? Why worry? Interpreting anxiety as facilitative and stress appraisals. *Anxiety, Stress and Coping*, 28(2), 205–214. <https://doi.org/10.1080/10615806.2014.931942>
- Strom, R. E., & Savage, M. W. (2014). Assessing the relationships between perceived support from close others, goal commitment, and persistence decisions at the college level. *Journal of College Student Development*, 55(6), 531–547. <https://doi.org/10.1353/csd.2014.0064>
- Suh, H., Gnilka, P. B., & Rice, K. G. (2017). Perfectionism and well-being: A positive psychology framework. *Personality and Individual Differences*, 111, 25–30. <https://doi.org/10.1016/j.paid.2017.01.041>
- Tenney, E. R., Poole, J. M., & Diener, E. (2016). Does positivity enhance work performance?: Why, when, and what we don't know. *Research in Organizational Behavior*, 36, 27–46. <https://doi.org/10.1016/j.riob.2016.11.002>
- Thiagarajah, K., & Torabi, M. R. (2008). Irregular breakfast eating and associated health behaviors: A pilot study among college students. *Health Educator*. Retrieved from <http://eric.ed.gov/?id=EJ865575>
- Tice, D. M., & Baumeister, R. F. (1997). Longitudinal study of procrastination, performance, stress, and health: The costs and benefits of dawdling., 8(6), 454–458.
- Tugade, M. M., & Fredrickson, B. L. (2004). Resilient individuals use positive emotions to bounce back from negative emotional experiences. *Journal of Personality and Social*

Psychology, 86(2), 320–333. <https://doi.org/10.1037/0022-3514.86.2.320>

Turner, J. C., Leno, E. V., & Keller, A. (2013). Causes of mortality among American college students: A pilot study. *Journal of College Student Psychotherapy*, 27(1), 31–42.

<https://doi.org/10.1080/87568225.2013.739022>

Twenge, J. M. (2017a). Have smartphones destroyed a generation? *The Atlantic*, September issue. Retrieved from https://www.theatlantic.com/magazine/archive/2017/09/has-the-smartphone-destroyed-a-generation/534198/?mc_cid=8df8b5c6d0&mc_eid=7192cc6908&utm_source=twb

Twenge, J. M. (2017b). *iGen: Why today's super-connected kids are growing up less rebellious, more tolerant, less happy - and completely unprepared for adulthood - and what that means for the rest of us*. New York, NY: Simon & Schuster, Inc.

Universidad Tecmilenio (2018). Retrieved from <http://tecmlenio.mx/en>

University of Miami (2015). Office of institutional culture. Retrieved from <https://umculture.miami.edu>

van der Meer, J., Jansen, E., & Torenbeek, M. (2010). “It’s almost a mindset that teachers need to change’: First-year students’ need to be inducted into time management. *Studies in Higher Education*, 35(7), 777–791. <https://doi.org/10.1080/03075070903383211>

VIA Institute on Character (2018). Bring out the best in others. Retrieved from <http://www.viacharacter.org/www/Professionals>

Walton, G. M., & Cohen, G. L. (2011). A brief social-belonging intervention improves academic and health outcomes of minority students, 331(6023), 1447–1451.

Watson, D., Clark, L. A., & Tellegen, A. (1988). Development and validation of brief measures of positive and negative affect: The PANAS scales. *Journal of Personality and Social*

- Psychology*, 54(6), 1063–1070. <https://doi.org/10.1037/0022-3514.54.6.1063>
- Webber, K. L., Krylow, R. B., & Zhang, Q. (2013). Does involvement really matter? Indicators of college student success and satisfaction. *Journal of College Student Development*, 54(6), 591–611. <https://doi.org/10.1353/csd.2013.0090>
- Welle, P. D., & Graf, H. M. (2011). Effective lifestyle habits and coping strategies for stress tolerance among college students. *American Journal of Health Education*, 42(2), 96–105. <https://doi.org/10.1080/01425690701737481>
- Wellness at Penn. (2018). Retrieved from <https://www.wellnessatpenn.com>
- Wheeler, M. S., Arnkoff, D. B., & Glass, C. R. (2017). The Neuroscience of Mindfulness: How Mindfulness Alters the Brain and Facilitates Emotion Regulation. *Mindfulness*. <https://doi.org/10.1007/s12671-017-0742-x>
- Whitney, C. (2010). Social supports among college students and measures of alcohol use , perceived stress , satisfaction with life, emotional intelligence and coping. *Journal of Student Wellbeing*, 4(1), 49–67.
- Willcocks, L. & Lester, S. (1996). Beyond the IT productivity paradox. *European Management Journal*, 14(3), 279-290.
- Williamson, A. M. (2000). Moderate sleep deprivation produces impairments in cognitive and motor performance equivalent to legally prescribed levels of alcohol intoxication. *Occupational and Environmental Medicine*, 57(10), 649–655. <https://doi.org/10.1136/oem.57.10.649>
- Wood, A. M., Joseph, S., Lloyd, J., & Atkins, S. (2009). Gratitude influences sleep through the mechanism of pre-sleep cognitions. *Journal of Psychosomatic Research*, 66(1), 43–48. <https://doi.org/10.1016/j.jpsychores.2008.09.002>

- Wood, A. M., Maltby, J., Gillett, R., Linley, P. A., & Joseph, S. (2008). The role of gratitude in the development of social support, stress, and depression: Two longitudinal studies. *Journal of Research in Personality*, 42(4), 854–871. <https://doi.org/10.1016/j.jrp.2007.11.003>
- Wright, L., & Kutcher, S. (2016). *Adolescent brain development*. (M. M. McCarthy, Ed.). Morgan & Claypool Publishers. <https://doi.org/10.1007/978-1-62703-655-9>
- Yeager, D. S., & Dweck, C. S. (2012). Mindsets that promote resilience: When students believe that personal characteristics can be developed. *Educational Psychologist*, 47(4), 302–314. <https://doi.org/10.1080/00461520.2012.722805>
- Yeager, D. S., Walton, G. M., Brady, S. T., Akcinar, E. N., Paunesku, D., Keane, L., ... Dweck, C. S. (2016). Teaching a lay theory before college narrows achievement gaps at scale. *Proceedings of the National Academy of Sciences*, 113(24), E3341–E3348. <https://doi.org/10.1073/pnas.1524360113>